G10 FOCUS TEST: USING THE CONVENTION IN-IN/OUT OUT
WHEN C IS TO U1 WE MUST TURN FOCUS KNOB CW,
I.E. TOWARDS BIGGER NOS.
ALWAYS TAKE UP SLACK IN THE CCW DIRECTION
I.E. MAKE THE FINAL SETTING TURNING TO SMALLER NOS

G40 FOCUS TEST: USING THE CONVENTION IN/OUT OUT
WHEN C IS TO U1 WE MUST TURN FOCUS KNOB TO
SMALLER NOS
ALWAYS TAKE UP SLACK BY GOING TO A MUCH
SMALLER NO. FIRST & THEN INCREASE TO DESIRED
ONE.

3

Dome Temp.

Focus

Dome Temp.

Hour Angle End	De

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						David Dunlap Observatory 74" Logbook Vol 35 Plate Nos. 28445 - 28934 Jun 1965 — Mar 1966	

5

Date 16 June 1965 Wed **Observer** Jr. **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28444 F4	focus test	in m/aut out		Gr 10	II a Dk	9	61°F			C	01 00
F5	"	"		"	"	"	"			"	"
F6	"	"		"	"	"	"			"	"
F7	"	"		"	"	"	"				"

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 00	45°				3/3	no filter plate broke in corp	C to VI
"	"				"		"
"	"				"	focus changed: 0.5 → 1.5	C to VI not as bad
"	"				"	focus changed 1.5 → 2.5	BETTER SI C TO VI.
						Looks as though best focus would be 3.0	

7

Date Fri Sat June 18-19, 1965 **Observer** Rc Sd **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28445	170235	18 23.2	-25 19	G40	IIaO 6	13	64	0 39 38	1 54	A	1 01 W
28446	174237	18 44.5	+52 53	"	"	13	61	2 22	2 39	B	1 26W
28447	α Aql.	19 41.5	+10°22'	G40	"	"	60	02h09	3h03	C	0 51W
28448	α Aql	"	"	"	"	"	"	03h09	3h11	A	0W9W
28449	"	"	"	"	"	"	"	03 16	03 18	B	1 06W

Dome Temp. 66

Focus

Dome Temp.

Transparency Conditions ... not good -
partly cloudy + haze 1st half
haze + cirrus + clouds 2nd half

8

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
1 54	A	1 01 W	−25° 16′	0	6.71	B1 5 [III-V]	8-8-8	Cu-Be Prog.	cirrus moving in again	½ ✕ Scns 6	1859 1860	grinding comp weak spot stars
2 39	B	1 26 W	+52 58	0	5.81	B3 2 [III-V]	8-8-8	Cu-Be Prog		Scns 6	1862 1864	
3 03	A	0 51 W	+10° 32′	0	4.15	K3II	8-8-8	MK Standard	full exposure	Scns 4½	1865 1867	fair
3 11	A	0 59 W	"	0	4 15	K3II	8-8-8	" "	½ exp.	Scns 4½	1868 1869	dark
3 18	B	1 06 W	"	"	"	"	8-8-8	" "	¼ exp.	Scns 4½	1870 1870½	weak grinding

9

Date Sa/Sun June 19/20 **Observer** SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
3382-3246	α Cr B	15h 33.1	+26°50	5-4-2		20"/28"		11h 15			1h 40m W
3383-3247	162714	17 50.8	-6 8	7-4-3		20"		0h 5m			0h 1m E
3383-3248	170764	18 29.8	-19 9	7-5-3		20		0h 40m			0h 3m W
3383-3249	Jo 50-M25	18 29.8	-19 9	7-5-3		20		1h 16m			0h 32m W
3383-3250	β Sct	18 45.3	-4 47	6-5-2		20		1h 40			0h 40m W

SUN. 8 AM

EX. MTR found ON.

TELESCOPE UNCLAMPED!!

Gallery door unlocked.

Dome Temp. 67°F

Transparency Conditions very good

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1^h40^mW		mod. good	2.23	A0V			
0^h1^mE		v. good	7.01	G0Ib	+ Sky		
0^h3^mW			7.2	G0Ib	+ Sky	Moon	
0^h32^mW			8.2	B2-3	+ Sky		
0^h40^mW (end)			4.2	G5II	+ Sky	Clouds cover sky completely	

flashlight very weak

11

Date 20-21 June 1965 Observer MSE Julian Day

Sun-Thurs

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28449F,							76°F			A	
28450	HD 115043	13 09.5	51 14	G40	Ta 4b	13	11	2100	2131	B	0158W
28451	"	"	"	"	"	"	"	2132	2205	C	0232W
28451T	Calibration Step Wedge			for plates		28445 - 28451					

Done Temp.
Focus
Done Temp.

Dome Temp. 78°F

Focus .....

Dome Temp. .....

Transparency Conditions POOR 2110
O'CAST 2205

1.2

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	14						3/3 ← NO FILTER Deep neb 7 3		
	B	0158W	+5654	0-1	7.3	G1	8-8-8	MK STD #8 (7.5) {1675 1832.5	clouds moving thru / l wk
	C	0232W	"		"	"	8-8-8	" CLOUDY #8 {1883 1884.9	weak
								FOUND TELESCOPE WITH DUST COVER OPEN.	

13

Date 21-22 June 1965 (Mon of Tues) **Observer** Dm. Mc(Mee) **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. (MIDDLE)	Ending Time E.S.T. (MIDDLE) LST	P.H	Hour Angle
384 - 1	λ Sco	15 44.7	+07 28		t=20sec	15" diaphragm		21 29	15 12		E0 32
-2	M3 - 15'4	13 40.6	28 32		=30sec			22 02	15 44		W2 04
-3	I - II -28	"	"		"			22 53	16 36		W2 57
-4	λ Sco	15 44.7	07 28		t=20sec			23 09	16 52		
-5	M3-2	16 40.5	36 32		t=40sec			23 46	17 30		W0 52
-6	"	"	"		"			00 09	17 52		W1 12
-7	M3 - 15	"	"		"			00 23	18 17		
-8	λ Sco	15 44.7	+07 28		t=20sec			00 02	18 [illegible]		
-9	M10 Std B	16 55.2	-04 03		t=30sec			1 17	19 00		
-10	M10-3	"	"		"			1 37	19 20		
-11	κ Aql	19 35.1	-07 06		t=10 sec			2 06	19 49		
-12	β Aql	19 53.7	+06 19		t=10 sec			2 25	20 09		
-13	α Del	20 37.9	+15 47		"			2 35	20 18		
-14	ε Cyg	20 44.8	33 50		"			2 53	20 36		
-15	ε Aql	20 45.7	-09 38		"			2 02	20 45		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 72°F

Focus .....

Dome Temp. 61°F

Transparency Conditions VERY GOOD
very dark sky, fair seeing

Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E0 32				G0 V	Y - A5, B - A5, U - B3		
W2 04					Y - D2, B D2, U - D3 + sky		
W2 57					Y - D2 B D2 U - D3 + sky		
					Y - A5 B - A5 U - 33		
W0 50					Y D2 B D2 U D2 ~~+ sky~~		
W1 12					Y D1 B D1 U D1 + sky		
					~~Y A5 B A5~~		
					Y A5 B A5 U B3		
					Y D1 B D1 U D1	+ sky	
					~~Y B2~~	+ sky	
						+ sky	
					A5 A5 B4		
				B9 V	A5 A4 A5		
				K0 III	A3 A3 A6		
				A1 V	A5 A4 A6		

15 → listed declination of δ Sco must be incorrect (−22° 30′ δ1960 ~~uncorrect~~)

Date 22-23 June/65 2nd-Wed **Observer** H.G. Jr. MG **Julian Day**

Dome Temp.
Focus 73
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28452	π Sco	1960 15h 56m.4	1960 −26° 00′	G40	IIaO b	13	73°	20 56	20 58	A	01 12 E
28453	δ Sco	1960 15 58.0	1960 −22 29.	G40	IIaO b	13		21 11	21 12	B	00 59 E
28453 F1	Focus Test			G40	IIaO b	13	72°F			C	
28455	π Sco	1960 15h 56.4	1960 −26 00	G10	IIaO b	9		22 07	22 54	C	00 45 W
28454	δ Sco	1960 15 58.0	1960 −22 29.	G10	IIaO b	9	72°F	21 36	22 00	B	E0 12
28456 F1	focus test	in in / out out		G10	IIaO b	9				C	
28456	Hya	1960 18 35.6	1960 38 45	G10	IIaO b	9	69°F	23 03	23 07	B	E1 42
28456 F2	focus test	in in / out out		G10	IIaO b	−3	68°F			A	
28457	Calibration Hya Wedge			for plates		28452 −53					

Dome Temp. 75°F

Focus 72(40), 70½

Dome Temp. .....

Transparency Conditions Poor — light clouds most of night

2200 — very poor

2300 clouds from W.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	01 12 E	-26 01	0	2.73	B1 V	24	Spec. plates for D.C. Morton	#4 (1) {1889 2200	Luck
2. 12	B	00 19 E	-22 33	0	2.21	B0 V	24	" " " " "	#4 (1) {1891 1892	Luck
	C						3/3 ← no filter	THINKING OF 4.0 — THIS PLATE WILL BE TOO STRONG	O.K
22 54	C	00 45 W	-26 01	0⁻	2.73	B1 V	8-8-8	Spec. plates for D.C. Morton	rem #4 (5) 1902 1920	Luck
2 11	B	E0 12	-22 31	0⁻	2.21	B0 V	8-8-8	" " " " "	#4 {1892 1907	fine
	C						3/3 ← no filter			
3 21	B	E1 42	38 44		0.04	A0	12/12	Std Vel (Rc)	#4 (-3) {1921 1936	fine
	A						40/40	focus set 71°	Tube work	O.K
				23 20		Closing — completely overcast				

17 TELESCOPE IS STICKING BADLY IN δ

Date 24-25 June/65 Observer SK-Zmac Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28456 F_3	focus test in in/out out			G-10	IIa O	9	62°F			C	
F_4	"	"		"	"	"	"			B	
G_5	"	"		"	"	"	62			C	"
385-3251	α CrB	15^h33^m	+26°50'		5-4-2	28"		21^h05			5°E
3252	"	"	"					21^h30			
3253	1627T4	17^h50^s	-6°7'		7-5-2/3	20"		22^h47			3°5
28457	2"Keller f/100 ba	17 58 3	-24 24	G40	IIa-Ob	SHORT 17	56°F	23 44 36	00 54	C	WO 46
28457 F_1	focus test	in in/out out		"	"	13	54°F	———	———	A	
28457T	Calibration Lily Wedge for plate 28457										
385-3254	U Sgr 176744	18 26.0	-19 11.7		7-5-3	20"		1^h07^m			0°T-W
385-3255	176 155	18 56.7	+17 19		6-5-2	28"		1^h50^m			1h 0 W
385-3256	η Aql	19 50.7	-0 55		6-4-2	28"		2^h25			0h 57 W

Dome Temp.
Focus 66 (G
Dome Temp.

Dome Temp. 60°F

Focus 66 (G40)

Dome Temp. .....

Transparency Conditions ..... excellent .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 1m W	+45°				3/3	no fillis dome temp 68°F focus 2.5 → 3.0 (4 sec)	sl cloud
					3/3	focus 3.0 → 2.8	CLOR - WISPY INFO - THIN THIN cloud gone sl. cloud
"	"				3/3	same focus	
						F 5 runs about the correct focus, possibly	
						that is apparently a very slight discrepancy	
						between the focus in PH 69	
0h 17m E							
			2.2	A0V	average exposure	test with differing time constants, diaphragms and	
1h 0m E			7.0	G0Ib	+ Sky	scanning speeds	
WO 46	-24 19	O	8.8	B2Ve	8-8-8	SK faint Be [SLIT LENGTH #5 PER INSTRUCTION] SLIT ~ 4 sec #9 {~~10~~ 1943 46 NOT RELIABLE	weak
					30/30		
0h 44m W			7.0-8.2	F7-G5Ib		+ Sky	
1h 0m W			5.8	cF5		+ Sky	
0h 37m W			4.1-5.2	F6-G4Ib			

19

Date 25 June 1965 (=R) **Observer** SK-MSe **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
385-3257	22 Vul	$20^h 14.0^h$	$+23° 23'$		6-5-2	28½		$2^h 46^m$	
-3258	ϑ Cyg	20 18.6	39 56		5-4-2. a			$3^h 10^m$	

Dome Temp.
Dome Temp.
Hour Angle End

Dome Temp. 52°F

Transparency Conditions good

Focus

Dome Temp.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0^h38^m W		aver.	6.3	G2 Ib			
	0^h54^m W		~~poor~~	2.24	F8 Ia			

21

channel 2 used

Date June 25-26 Fri-Sat Observer Dm - Lv Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Filt.	Temp.	MIDDLE Starting Time E.S.T.	~~Ending Time E.S.T.~~ LST	P.J.	Hour Angle at MIDDLE
386-1	λ Ser	15h 44m.9	07° 27'		A 6	A6	B4	21:25 End			
-2	M3 206	13 40.6	28 32		C 5	C5	D 4	21:58	15:57		02
3	M3 V#154	"	"		C 6	D3/D2	D4	22:26	16:25		02
4	M3 1402	"	"		D4	D4	D4	23 05	17:04		03
5	λ Ser	15 44.9	07 27		A6	A6	B4	00 20	18:19		02
6	M13 V# 2	16 40.5	36 32		D2	D2	D4	00 40	18 38		0
7	M13 Std# 1	"	"		C5	C5	C6	01 17	19 16		01
8	M13 Std# 56	"	"		D1	D1	D4	01 30	19 28		01
9	V# 1	"	"		D2	D2	—	02 15	20 13		03
10	M56 V# 1	19 15.2	30 06		D3	D3	D4	03:00	20 58		01

Dome Temp. .....

Focus .....

Dome Temp. 58° F

Transparency Conditions ..... perfect

A: 36"
G: 24"
E: 18"

Hour Angle ~~End~~ MIDDLE	Declination	INT TIME ~~Seeing~~	Ptg. Mag.	Sp.	SKY ~~Comp.~~	REMARKS	DIAPH ~~Quality~~
		10s				Dark Current on Ch 1 too high D ? Used Ch 2	G: 24" E
15:57	02 17 W	40					E
16:23	02 45 W	40			R; L; .0	23:15 Dec Doesn't Work last 3/4 h.	
17:04	03 24 W	40					
18 17	02h34m W	16				00:15 Integrator Falling Apart bottom	
18 54	01 58 W	70			R; D Ur	Please be more specific!	
19 20	02 37 W	40			D	HW OK	
19 38	02 49 W	40			D		
20 11	03 33	70				Trouble identifying star	
20 53	01 45 W	70			U		
						Close up 3:10	
						sky getting bright	

Cn, Rc, Ce VISITORS SHOWED UNIVERSE, M13

23

Date Sat/Sun June 26/27 Observer Rc Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.J	Dome Temp. / Focus / Dome Temp. / Hour Angle End
2845	H# 171780	18h 31.6	+34° 22'	G40	IIaO	13	63	23:02 16	23:34	17	0h 57
2845	HD 173217	18h 39.1	-07° 13'	G40	IIaO	13	62	00h 03 56	01:55	B	1h 3
2846	HD 186547	19h 40.0	+13° 03'	G40	IIaO	13	58	02h 23 12	02 46	C	1h 07
2846	41 Cyg.	20h 25.3	+30° 02'	G40	IIaO	13	58	02h 46 4	03 04	D	1h 0
2846	〃	〃	〃	〃	〃	〃	〃	03h 13 2	03 17	E	1h 32

Dome Temp. .....

Focus .....

Dome Temp. 5-90

Transparency Conditions ... Cloudy then clearing
clouds again 2B^h 57

24

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0^h 57 E	+34° 25'	0+	5.98	B3 + [III. V]	8-8-8	Be-Cr	cirrus around. – exposure meter Problems. Sens 6 [2] {1977 / 177.}	fine
1^h 18 W	-7° 08'	0+	8.02	B I. p	8-8-8	Cr-Be	Sens 8 [12] {1974 / 1984}	fine
1^h 07 W	+13° 10'	0+	6.07	B 8	8-8-8	B8-B9 Binary	clear contrast a brighter of two stars Sens 6 [2] {1987 / 1987}	fine
W 0^h 24	+30° 15'	0+	4.43	F-5 II	8-8-8	MK Standard	½ normal Sens 4 {0.8 count	good
W 0^h 5' 2	"	"	"	"	8-8-8	"	½ normal " {0.4 count	fine

Clearing so as not get light

25

Date 27-28 June last Observer Hr. Mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28463	HD 136 202	15 14.2	+02 59	Gray	IIaD	13	73°F	21 15	21 30	A	00 GW
28464	HD 131861	14 50.9	45 43	"	"	"	"	21 43	23 59	B	03 13
28464 F1	focus test	in in/out out	"	"	"	11	68°F	—	—	C	1 1
28464 T	Calibration Step Wedge for plates 28458-64										

Dome Temp.
Focus 72
Dome Temp.

Dome Temp. 76° F
Focus 721
Dome Temp. .....

Transparency Conditions some clouds at start -26
2220 at least / mag. dimming
2359 CLOUDS

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
21 30	00 18 W	+01 57	0	5.6	G0	8-8-8	Std. Vel.	#7 (6) {1996, 2002} fine
23 57	W3 13	45 28	0+	7.64	F3	8-16	KAFS FIELD DRAWN	#9 30 {2004, 2018} Late
	1 11	11				30/30	same focus	
							FOUND EX P. PLATE BOX IN DARKROOM (MAIN BLDG.) WITH SEVERAL MARKS OF VARIED DESCRIPTION ON IT.	

FOUND DOME UNGHAINED - WED P.M.

27

Date 30 June / 6 July **Observer** Wyd + MR **Julian Day**

Plate No.	Object	R.A. 1900 H M	Declination 1900 D '	Inst.	Emulsion	Slit	Temp.	Starting Time (MIDDLE) E.S.T. H M	Ending Time E.S.T.	P.E.
387 - 1	HR 5235	13 53.0	+18 35		t = 20 sec		70° F	21 35		
- 2	HR 5270	14 00.8	+9 52		"			21 42		
- 3	HR 5933	15 54.8	+15 47		"			21 52		
- 4	HR 5447	14 33.1	29 54		"			22 01		
- 5	HR 5511	14 44.5	+02 02		"			22 10		
- 6	HR 6355	17 03.7	+12 47		"		62° F		?	
- 7	HR 5933	15 54.8	+15 47		"			22 26		
- 8	HR 6092	16 18.6	+6 24		"			22 37		
- 9	HR 5685	15 14.8	-09 16		"			22 45		
- 10	HR 5933	15 54.8	+15 47		"			22 52		
- 11	HR 6629	17 46.2	+02 43		"			23 01		
- 12	HR 6705	17 55.8	51 29		"			23 24		
- 13	HR 5933	15 54.8	+15 47		"			23 31		
- 14	HR 6714	17 58.9	+02 56		"			23 42		
- 15	HR 6629	17 46.2	+02 43		"			23 50		
- 16	HR 7069	18 45.5	+18 08		"		59° F	23 57		

Dome Temp.
Focus
Dome Temp.

Hour Angle East	
MIDDLE	
2	50
W2	W3
W0	16
W1	41
W1	44
W0	50
W0	37
W0	48
W1	16
1	33
E0	14
W1	14
W0	02
W0	12
E0	30

Dome Temp. 70° F

Focus

Dome Temp. 59.0 =

AFTER #11 — REIAT FOR DOME-TURNING (WEST) STUCK: HAD TO CUT POWER

Transparency Conditions

28

Ending Time E.S.T.	P.M.	Hour Angle End MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	narrow / wide REMARKS	Quality
		2 W 00 M			2.80	G0 III		B6 B2 dry ice put in ~ 8:30-9: PM (DST)	
		W2 00			6.12	G0 III		D3 C4	
		W0 16			3.86	F6 V		C3 B4	
		W1 41			4.48	F2 V		C4 B5	
		W1 44			3.76	A0 V		C3 B4	
					4.91	A3 V		C5 C1	
		W0 50			3.86	F6 V		C3 B4	
		W0 37			3.91	B5 V		C2 B2	
		W0 48			2.74	B8 V		B6 B2	
		W1 16			3.86	F6 V		C3 B4	
		1 33			3.74	A0 V		C3 B4 ← THROUGH W DOME	
		E0 14			2.42	K5 III		B5 B2	
		W1 54			3.86	F6 V		C3 B4	
		W0 02			3.92	B5 V		C3 B4	
		W0 23			3.74	A0 V		C3 B4	
		E0 30			4.37	A3 V		C4 B5	

29

Date Thurs 1 July (cont'd) Observer M.L. Mee Julian Day

Plate No.	Object	R.A. 1900 H M	Declination 1900 ° ′	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle
387 - 17	HR 7178	18 57.6	32 38			20sec	59°	0M 06M			20M 32M
-18	HR 7235	19 03.8	+13 49			"		0 17			E0 28
-19	HR 5933	15 54.8	+15 47			"		0 23			W2 47
-20	HR 6714	17 58.9	+02 56			"		0 33			W0 53
-21	HR 7377	19 23.7	+03 02			"			?		
-22	HR 5933	15 54.8	+15 47			"		0 50			W3 14
-23	HR 7446	19 34.7	-07 07			"		0 59			E0 16
-24	HR 7447	19 34.9	-01 23			"		1 "			E0 05
-25	HR 6629	17 46.2	+02 43			"	58°F	1 18			W1 51
-26	HR 5933	15 54.8	+15 47			"		1 41			W4 05
-27	HR 7906	20 38.0	+15 48			"		1 50			E0 29
-28	HR 5933	15 54.8	+15 47			"		1 58			W4 13
-29	"	"	"			"		2:01			W4 [illegible]
-30	"	"	"			"		2:04			W4 29
-31	HR 7977	20 47.7	45 59			"		2:16			E0 [illegible]
-32	HR 8143	21 16.0	39 15			"		2:22			E0 39

Dome Temp. From
Dome Temp.

Dome Temp. 59°F

Focus

Dome Temp. 57°F

Transparency Conditions EXCELLENT

M.D.-

Hour Angle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HBN HBW REMARKS	Quality
E0 H 32 M			3.30	B4 V		B6 B2	
E0 28			3.02	A0 V		B6 B2	
W2 47			3.86	F6 V		C3 B4	
W0 53			3.92	B5 V		C3 B4	
			3.44	A0 V		C2 B3	
W3 14			3.86	F6 V		C3 B4	
E0 16			5.04	B9.5 III		C5 C1	
E0 05			4.28	B5 III		C4 B5	
W1 51			3.74	A0 V		C3 B4 ← added ink to pen	
W4 05			3.86	F6 V		C3 B4	
E0 29			3.86	B9 V		C3 B4	
W4 23			"	F6 V		C3 B4	
W4 26			"	"		" "	
W4 29			"	"		" "	
E0 13			4.89	B3 V		C5 C1	
E0 35			4.28	B9.5 V		C3 B4	

31
(CONT'D)

Date THURS, 1 JULY Observer Mal. Mac Julian Day

Plate No.	Object	R.A. 1900 H M	Declination 1900 ° '	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. (MID-)	Ending Time E.S.T.	P.E	Hour Angle
387-33	HR 8279	21 37	61 56			20 sec		2 30			E 48
-34	HR 8494	22 13.7	56 52			11		2 39			E 15
-35	HR 8585	22 29.9	50 06			11		2 46			E 24
-36	HR 7796	20 20.9	40 08			4		2 55			W 0 54
-37	HR 8622	22 37.7	38 52			4		3 07			E 12
-38	HR 8634	22 39.7	+10 39			4		3 16			E 54
-39	HR 7977	20 47.7	45 59			11		3 28			W 0 59
-40	HR 7069	18 45.5	+18 08			4		3 37			W 3 1

Dome Temp. 5
Focus
Dome Temp.
MID-

Dome Temp. 57°F

Transparency Conditions

Focus

Dome Temp. ~57°F

M13 =

Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HP narrow	HP wide	REMARKS	Quality
E0 48			4.87	B2 V b		C 4	B 6		
E1 15			4.23	F0 IV		C 4	B 4		
E1 24			3.85	A2 V		C 3	B 3		
W0 54			2.32	F8 V b		B 5	B 1		
E1 12			4.91	O9 V		C 4	B 5		
E1 04			3.61	B8 V		C 2	B 2		
W0 59			4.84	B3 V e		C 5	C 1		
W3 11			4.37	A3 V		C 4	B 5		

33

Date THURS-FRI 1-2 July **Observer** RC - MF **Julian Day** .....

Dome Temp. .....
Focus .....
Dome Temp. .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28465	π Sco	15 52.8	-25 50	G40	IIaD	13	68°F	21h 43	21h 49		0°5W
28466	HD 145792	16h 07.7	-24° 10'	G40	IIaD	13	69°F	22h 16	23h 00	E	1°4W
28467	HD 172694	18h 36.5	-15° 57'	G40	IIaD	13	66°F	23h 30	01h 57	A	1°4W
28468	HD 187691	19h 46.2	+10° 10	G40	IIaD	13	61°F	02h 24	02h 40	E	1°4W
28469	55 Cyg	20h 45.5	+45° 45	G40	IIaD	13	60°F	2h 56	03h 02	C	0°7W
28470	55 Cyg	"	"	"		"	"	3h 10m	03h 14	A	0°7W
28471	55 Cyg	21h 01.3	+43°32	G40	IIaD	"	"	3h 24m	3h 26	B	0°4W
28472	"	"	"	"	"	"	"	3h 29	3h 31	C	0°5W

Dome Temp. 70° F

Transparency Conditions FAIR - Assessment of night.

Focus

Dome Temp.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 15 W	+26° 0′	0+	2.73	B-V	8-8-8	DC. MORTON from ut 70½ #4 (1) {2021 2022	comp work lasting
1h 11 W	−24° 17	0+	7.0	B8	8-16	Bx-D ☐7 (2) {2224 2225	use for guiding
1h 41 W	−15° 53	0+	8.31	B7e [V-1]	8-8-8	En-Be focus 70 #8 (10) {2226 2230	fine
1h 14 W	10° 20	1	5.8	F-8	8-8-8	Std Vel focus 64 #6 (3) {2038 2041	Lasting
0h 38 W	+46° 0′	1	4.9	B3Ia	8-8-8	MK Std. focus 67 ½ round #5-1 {2042 2043	fine
0h 49 W	"	1	4.9	B3Ia	8-8-8	MK Std ¼ round #5-½ {2044 2045½	fine
0h 46 W	+43° 4′	1	5.4	K5 Ib	8-8-8	MK Std ½ round #5-1 {2045 2046	guiding
0h 50 W	"	1	"	"	8-8-8	" ½ round #5-1½ {2047 2047½	fine

dec guide stuck periodically (clean + test)

power supply from Hydro off early in evening due to storm
Last night; called Frank; Hydro fixed it.
shorted; 35 Com, M13; ~180 visitors; Dm, V, Sm.

35 Date Sat-Sun, July 3-4, 1965 Observer Cr SAK Julian Day

Dome Temp. 68
Focus 69
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
28473	HD 166566	18 06.1	-15 42	C40	IIaoB	.017	66	23 30 (22 18)	00 14	A	4°W
28474	HD 172694	18 36.5	-15 57	C40	IIaoB	.017	66	00 22 (60)	00 58	B	4°W
28475	BD +10 3734	18 59.4	+10 58	C40	IIaoB	.017	63	01 06 (14)	03 06	C	4°W
28476	HD 204722	21 25.5	+43 54	C40	IIaoB	.017	60	03 14	03 46	D	4°W
28476T	Calibration Step Wedge			for plates 28465-76							

Dome Temp. 66°

Focus 69

Dome Temp.

Transparency Conditions Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
00 36 W	-15 41	0	8.13	B1 IIe	12-12-12	Cn Be Finder field shot EXP INTR COUNTING Focus 69 VERY SLOWLY. #9 2076 (20)	Smoking.
00 48 W	-15 53	0	8.31	B0e III	12-12-12	Cn Be #9 2087 2107	fine.
02 04 W	+10 05	0	9.66	B3 V. line	12-12-12	Cn Be Third comp 10^3 s EXP INTR NOT AS TRAINED. #9 2108 (2) (7)	fine
00 49 W	+44 11	0	7.64	B2 V. line	12-12-12	Cn Be Dave. #8 2118 2126 (10)	fine.

→ Visitors eyepiece illumination not working.

Visitors left ~ 3:15. Found that the SW would not work & found that a fuse had blown.

37

Date 4-5 July/65 Observer Dm-Hyde Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Y Exposure	B Slit	U Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle
									MIDDLE		
388-1	J Her	16H 18.7M	46° 23'		B3	B1	B3	21 30	16 04		60 14
-2	M3 #154	13 40.6	28 32								
-3	#206	"	"		C6	C6	D6	21 55	16 28		W2 49
-4	"	"	"		C6	C6	D6	22 16	16 48		309
-5	M3 #2	16 40.5	36 32		D4	D4	D6	22 59	17 23		W 43
-6	"	"	"		D4	D4		23 39			53
-7	#1	"	"		D2	D3	D5	23 18	17 53		W1 14
-8	#56	"	"		D3	D3	D5	23 27	18 02		W1 23
-9	J Her	"	"		B3	B1	B3	23 42	18 16		W1 38
-10	M10 #6	16 55.2	-04 03		D4	D4	D6	00 03	18 37		W1 37
-11	M10-d	"	"		D6	D6		00 20	18 54		1 54
-12	M10 #3	"	"		D4	D4	D6	00 36	19 11		W2 13
-13	"	"	"		D5			1 03	19 37		43
-14	M3 #2	"	"		D5	D5	D6	1 18	19 52		W2 58
15	J Her	16 18.7	46 23		B3	B2	B3	1 42	20 16		W3 58
-16	M15 #1	21 28.3	+12 01		D5	D5	D6	1 04	20 38		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 69°F

Focus

Dome Temp. 63°F

Transparency Conditions very good

few clouds in south ALL NITE

Hour Angle ~~East~~	Declination	Seeing	Integration Time / Ptg. Mag.	Sp.	sky ~~Comp.~~	REMARKS	~~Quality~~
E0 14m 14s		10	3.89		no		G
		40				TOO FAINT — 1/4 moon	
W2 49		40			✓		E
3 09		11			✓		G
W0 43		60			UR		E
53		60					D
W1 14		40					G
01 23		40			✓		G
W1 58		10	3.89		no		G
W01 37		50			✓	moon set	G
1 54		80	14.82		✓	faintest star ever observed @ DDO!!!	E
W2 17		70			LR		G
2h 43		70			✓		E
W2 58		70			✓		E
W3 58		10	3.89		no		G
		60			lower R		G

39

Date 5 July 61 Observer Dm - Nye Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Exposure	Sec.	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Dome Temp. / Focus / Dome Temp. / Hour Angle
					Y	B	U	MIDDLE			
388-17	M15 #1	21h 28.3m	+12° 01'		25	25	26	2h 16m	2h 53m		
-18	" Std Dm	"	"		26	26		2 34	21 09		

Dome Temp. 63°F

Focus .....

Dome Temp. .....

Transparency Conditions very good - some clouds in far south area TB.

M.D. - interpolation time

Hour Angle	Declination	[illegible]	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		68			✓	more comp necessary — 100(?)	E
		70					

02:45 - CLOUDS

41

Date 5-6 July/62 Observer Nyl. Lyn Julian Day

Lyon-Lines

MIDDLE

Plate No.	Object	R.A. 1900 H M	Declination 1900 ° ′	Inst.	Emulsion	Slit	Temp.	~~Starting~~ Time E.S.T. H M	Ending Time E.S.T.	P.H	Dome Temp. / Focus / Dome Temp. / MID Hour Angle H M
389 -1	HR 5933	15 54.8	+15 47		t-20 sec			21 17			0 0
-2	HR 5854	15 42.6	+06 32		"			21 33			0 30
-3	HR 5847	14 33.1	29 54		"			21 49			W1 55
-4	HR 5511	14 44.5	+02 02		"			22 01			W1 55
-5	HR 5854	15 42.6	+06 32		"			22 14			W1 10
-6	HR 6355	17 03.7	+12 47		"			22 25			0 0
-7	HR 5993	16 03.9	-20 35		"			22 41			W1 15
-8	HR 5854	15 42.6	+06 32		"		56°	22 54			W1 50
-9	HR 6355	17 03.7	+12 47		"			~~23 07~~			~~W0 [illegible]~~
								23 11			W0 [illegible]
-10	HR 6097	16 18.6	46 24		"			23 23			W1 42
-11	HR 6588	17 38.4	46 02		"			23 33			W0 33
-12	HR 6624	17 06.2	+02 43		"			23 45			W0 38
-13	HR 6714	17 58.9	+02 56		"			23 55			W0 35
-14	HR 5854	15 42.6	+06 32		"			00 09			W3 05
-15	HR 6355	17 03.7	12 47		"			00 24			1 58

Dome Temp. 63°F

Focus .....

Dome Temp. 56°F

MID-

Transparency Conditions ..... good

~1/4 moon

Dry ice put in at 07:00 EST

Ending Time E.S.T.	P.M.	Hour Angle East H M	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS (HBW) (HBW) (45) (42) (41) (38)	Quality
		0 0						C3 B4 B5 B6 B6 C2	+ hazy
		0 30						B6 B2 B4 B6 B6 C3	
		W1 55						C4 B5 B6 C2 C2 C3	
		W1 55						C3 B4 B5 B5 B5 B6	
		W1 10						B6 B2 B4 B6 B6 C3	
		0 0						C5 B6 C2 C3 C3 C3	
		W1 15						C4 B5 B6 C2 C2 C2	
		W1 50						B6 B2 B4 B6 B6 C3	
		~~W0 43~~						C5 B6 C2 C3 C3 C3	
		W0 46						"	
		W1 43						C3 B4 B5 B5 B5 B5	
		W0 32						C2 B3 B4 B5 B5 B4	
		W0 38						C3 B4 B5 B5 B5 B6	
		W0 35						C3 B4 B5 B6 B6 B6	
		W3 05						B6 B2 B4 B6 B6 C3	
		1 58						C5 B6 C2 C3 C3 C3	

43 (cont'd)

Date 6 July (61) – Jens Observer Hall – Rose Julian Day

MID –

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.B	Hour Angle
389 – 16	HR 5854	15 4.6	+06 32		t = 20 sec			0 37			W 3 33
-17	"	"	"		"			0 44			W 3 42
-18	"	"	"		"			0 53			W 3 51
-19	"	"	"		"			1 01			W 3 57
-20	HR 6355	17 03.7	+12 47					1 21			W 2 56
-21	HR 7069	18 45.5	+18 08		"			1 33			W 1 28
-22	HR 7446	19 34.7	-07 07		"			1 47			W 0 52
-23	Dallas	20 51.1	17 26		t = 100 sec		54°	2 26	(END)		W 0 11
-24	HR 6355	17 03.7	+12 47		t = 20 sec			2 35			W 4 12
-25	"	"	"		"			2 43			W 4 19
-26	Jens	20 14 51.0	-02 57		t = 120 sec						
-27	HR 8781	23 03.0	+15 01		t = 20 sec			3 29			E 0 53
-28	HR 7796	20 20.9	+0 08		"			3 46			W 0 46

Dome Temp. 57°F

Transparency Conditions very good

Focus

Dome Temp.

MID-

44 WHY?

NOTE: THE 6" FINDER WAS SEVERELY OUT OF FOCUS - IT IS NOW BACK IN PROPER FOCUS ~~WITH THE CROSS HAIRS - ONE NOT BE USED AS IN PAST~~

Ending Time E.S.T.	P.B.	Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS (H(3 N) (H(3 W) 45 42 41 38	Quality
		W3 33						B6 B2 B4 B6 B6 C3	
		W 3 42						"	
		W 3 50						"	
		W 3 57						"	
		W 2 56						C5 B6 C2 C3 C3 C3	
		W 1 28						C4 B5 B6 B6 B6 C2	
		W 0 52						C5 B6 C3 C3 C3 C2	
		W 0 1 (END)		~4				D6, D3 ~ ruby	
		W 4 12						C5 B6 C2 C3 C3 C3	
		W 4 19						"	
								D6 D2 ~ ruby	
		E 0 53						B5 B1 B2 B2 B2 B2	
		W 0 46						B5 A6 B3 B4 B4 B4	
								DEW at DOME	

45

Date 8-9 July 1925 Observer Hertzsprung Julian Day

Dome Temp.
Focus 7
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28477	B Dra	17	28.2	52	23	Gr40	Hadk	13	72°F			A	
78	"	"		"		"						B	
												C	
28477	HR 7174 HD 176314	18	54.6	38	07	Gr40	"	13	72°F	21	10	21 43	A	E2
28477F	focus test in min/sec					Gr40	"	a	70°F					
28477T	Calibration Step Wedge for plate 28477													

Dome Temp. 77°F

Focus 71

Dome Temp. .....

Transparency Conditions very poor

EXP. MTR. NOT FUNCTIONING

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			52 20	0	3.8	2"	36	MK-std (1/2 normals) #7 (3)	
			"		"	"		" (1/4 normals) #7 1/2	
		E2 24	38 13	0	5.7	138	12-24	B6-139 clouds	guiding fogged C.K.
							3/3 ← @ -0 filter		

HD VISITORS: showed M13 Cn, V, CC - cloudy towards end.

47

Db

Date July 10-11 Sat-Sun 1965 Observer Cn Julian Day

Dome Temp.
Focus 6
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
Visitors left on 171780	a 23h → cloudy. Instructed Db in use of telescope. b is partly clear.										
28478	HD 171780	18 31.6	+34 22	G40	IIaO6	13	62°F	00h 00m 8s	00h 16m	A	9m 4s W
28479	"	"	"	"	"	"	"	00h 20m	00 36	B	01 m w
28480	HD 174237	18 44.5	+52 53	G40	IIaO6	13	60°F	00 48 6	01 00	C	01 11 W
28481	15 Vul	19 57.0	+27 29	G10	IIaO	9L	59°F	01 11 43	02 36	C	01 36 W

Dome Temp. 60

Focus 68

Dome Temp.

Transparency Conditions Poor, Clouds

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS			Quality
	A	00 40 W	+34 27	0	5.98	B3e V n	12-12-12	Ca Be (Field flattener not in pos.) (clouds)	#7	2207 2210	fine
	B	01 00 W	" "	0	5.98	"	12-12-12	Ca Be	#7	2211 2214	fine
	C	01 11 W		0	5.81	B3e V n	12-12-12	Ca Be	#7	2214 2217	out of focus
	D	01 36 W	+27 40	0	4.74	A5 IV m	12-24	Eq width (1/2 up) 1' 45 clouds heavier	#7	2217 2247	weak

← TERMINATED BY CLOUDS.

① NO MORE UNBAKED, UNSDOTTED II aO plates LEFT

② VISITORS EYEPIECE ILLUMINATION STILL NOT WORKING

49

Date July 11-12, 1962 Sun-Mon Observer VB/HG/Rse Md Julian Day

Plate No.	Object	R.A. 1900 1962	Declination 1900 1962	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Dome Temp. / Focus / Dome Temp. / Hour Angle MID
390-1	HR 5270	14h00m.8	+09° 52'		I=20			21 09			W2 12
-2	HR 5511	14 44.5	+02 07		"			21 28			W1 45
-3	5530	14 48.3	-15 51		"			21 37			W1 53
-4	5531	14 48.5	-15 32		"			21 43			W1 57
-5	5685	15 14.8	-09 16		"			21 52			W1 39
-6	5854	15 42.6	+06 32		"			21 59			W1 19
-7	5933	15 54.8	+15 47		"			22 08			W1 15
-8	5681	15 14.1	33 26		"			22 17			W2 04
-9	6092	16 18.6	46 24		"			22 26			W1 09
-10	6588	17 38.4	46 02		"			22 34			E0 02
-11	6355	17 03.7	12 47		"			22 44			W0 42
-12	6629	17 46.2	+02 43		"						
-13	6716	17 58.9	+02 56		"			22 59			W0 02
-14	7235	19 03.8	+13 49					23 08			E0 13
-15	7069	18 45.5	+18 08		"			23 15			E0 28
-16	7178	18 57.6	32 38		"			23 22			E0 27

Dome Temp. ..... CO_2 in 20:30

Focus ..... 900V 7400!

Dome Temp. .....

Transparency Conditions ..... Fine, ci Lo in North (wind 2m N)

Full 17000

2300 - clouds from NW. (50)

Ending Time E.S.T.	P.H.	Hour Angle E or W	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	H3N	H3W	REMARKS	Quality
		W 2 12			6.12	G0III		D3	C4		
		W 1 45			3.76	A0V		C3	B3		
		W 1 50			1.77	F2V		D1	C1		
		W 1 57			2.90	A3m		C1	B2		
		W 1 39			2.74	B8V		B5	B1		
		W 1 19			2.75	K2III		B6	B1		
		W 1 13			3.86	F6V		C2	B3		
		W 2 04			3.54	G8III		C2	B3		
		W 1 09			3.91	B5V		C2	B3		
		E 0 02			3.79	B3V		C2	B3		
		W 0 42			4.91	A3V		C5	B6		
					3.74	A0V		C3	B4		
		W 0 02			3.92	B9V		C3	B4		
		E 0 13			3.02	A0V		B6	B2		
		E 0 28			4.37	A3V		C4	B5		
		E 0 27			3.30	B9V		B6	B2		

51

Date 12 July/65 Observer Mse Mcl Julian Day

Dome Temp. 6
Focus 7½
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28482	HR 7174 HD176318	18 54.6	38 07	6in40	IIa Dp	13	61°F	00h 21m 4s	00 29	A	W 3.33
28483	HR 7511 HD186547	19 40.0	+13 03	"	"	"	"	00 33 6s	00 45	B	W 0.04
28484	HD187691	19 46.2	+10 10	"	"	"	"	00 49 6s	01 01	C	W 3.13
28485	HD198931	20 48.6	+40 3	"	"	17		01 08 31s	02 10	A	W 2.42
28485 F1	focus test in m/out m B			6in40	"	13	58°F			B	
28485 T	Calibration. Step Wedge			for	plates	28478	-80,	82-85			

Dome Temp. 63°F

Focus 67½ / Dome Temp.

Transparency Conditions poor - clouds
00:30 - fairly good

NO CROSSHAIR ILLUMINATION
(Visitors expired)

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		W 0 33	+38°12'	0	5.7	B8	12-12r	B8-B9 focus 67½	fine
		W 0 04	+13 13	4	6.07	B8	12-1212	"	fine
		W 0 13	+10 20	0	5.8	F8	12-12	Std Oel	fine
		W 0 22	+4 +4 18	?	9.3	B8 nne	12-24 Gr - Be	FIELD DRAWN (clouds) 3/3 ← Good field	fine

#7 (3) {2253, 2258
#8 (3) {2259, 2262
#2 (6) {2263, 2264, 2270
#9 {2276 76°S.U. of center to end

0120: thin cloud cover
0200 clouds

53

Date 12 - 13 July / 65 (Mon - Tues) **Observer** Hp - Lw - Hp **Julian Day**

Dome Temp. Focus 68° Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28486	λ Sco	15 41.6	+07 40	G10	IIaO (humidified (unsatisfactory))	9 XL		20 14 6 (11)	00 24	C	
28486 F1	focus test in my			G10	IIaO	9				B	
28487	HD 187691	19 46.2	+10 10	G40	IIaOb	13	64°F	01 11 (4)	01 18	A	
28488	HD 204722	21 25.5	+43 54	"	"	"		01 24 (12)	01 47	B	
28489	HD 204116	21 21.4	54 57	"	"	"	63°F	01 51 (25)	02 41	C	
~~28490~~	~~BD+49°3487~~	~~21 32.4~~	~~49 08~~	~~"~~	~~"~~	~~13~~				~~A~~	
28490	HD 210809	22 07.9	51 56	"	"	13				19	
91	"	"	"	"	"	"				B	
										C	
28490	ε Cep	22 11.3	56 33	"	"	"	62°F	02 46 (2)	02 50	A	
91	"	"	"	"	"	"	"	02 52 (20) (1)	02 57 (35)	B	
91 F1	focus test						62°F			A	
92	10 Lac.	22 34.9	+38 32					03 06 (35) (4)	03 09 (40)	B	
93	"	"	"					03 11 (50) (4)	03 12 (50)	C	
28493 T 28493 F1	Earlier in the night for plates 28487-93 Focus test July 14, 1965			C40	IIaO B	13	64°F			A	

Dome Temp. 72° F
Focus 68 2/3
Dome Temp.

Comp weak
All plates except 2849 are fogged.

0130: FINE → [illegible]

Transparency Conditions

~ Full moon (54)
2200 ~ 1 mag dimming
this clouds from ESE

Ending Time E.S.T.	P.O.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
	C	0406 W	07 28	0→2	4.42	G0 II	12-12-12	Eq. width (0°)	#6 {2285 2327.5	weak grainy
	A	2					5/5 ← no filter			
	C	0035 W	+10 20	2	5.8	F8	12-12-12	STD. VEL. focus 68 2/3	#7 {2328 2334 (6)	curled & wrinkled
	B	E0 35	44 12	2	7.64	B2 V nne	12-12-12	CN - BE " 4	#8 {2335 2343 (4)	grainy
	C	W0 23	55 13	1→0	7.34	B1 Ve	12-12-12	CN - BE "	#8 {2345 2355 (10)	weak
						~~A8p~~	~~Type~~	~~Cal Bez~~	~~#9 {3~~	~~(20)~~
					7.5	09.5		MK std 1/2 norm.		
	B				"	"		" 1/4 norm.		
	A	0017 E	+5652	"	4.19	F0 IV	36	MK std 1/2 norm	#6 {2356 2359 (3)	
	B	0018 E	"		"	"	36	" 1/4 norm	#6 {2360 2361.5 (1.5)	fine
							3/3 ← 4-0 filter			CK
	B				4.88	09 V	36		#7 {1.5	
	C	0015 E	+3653		"	"	36		#7 {0.75	
		2-2 / [illegible]					3/3 4-0 filter	Focus 71		C.K

Q 40 plates are fogged ln.

55

Date 14-15 July 1965 Wed-Thurs Observer Cn-Mse-Dt Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28494	δ Sco	15 54.4	-22 20	G40	IIaO	13		20 40.5	42.5	B	00 03E
28495	π Sco	15 52.8	-25 50	"	"	13 XL		20 ~~47~~ 52.4	20 54	C	W0 16
28494F1	Focus Test	~~2n 2n/out-in~~		G40	IIaO	13	76°			A	
28496	C Here	17 36.6	46 04	G10	IIaO unbaked unspotted	9XL		21 11 43	22 37	C	W0 07
28497	H Here,	17 42.5	+27 47	G10	"	"	70°F	22 43 56	0 35	C	W2 03
28497F1	focus test in in/out out			"	"	9	66°F			C	
97F2	"			G40	IIaO	13	"			A	
98	HD187691	19 46.2	+10 10	G40	IIaO	13	66°F	01 01 10	01 20	B	W0 43
28499	HD235668	21 53.1	51 06	G40	IIaO	17	"	01 33 37	02 47	C	W0 05
28500	HD210809	22 07.9	51 56	"	"	13	"	02 50 13	03 16	A	W0 20
28501	"	22 07.9	"	"	"	"	"	03 17 5	03 32	B	W0 36

Dome Temp. 78°F — 21h Clouds up ~1° in NW. 21 30 ~Full moon rising thru cloud in SE — Transparency Conditions Light Cirrus at start — Lowell — 56

Focus .....

Dome Temp. 63°F — 2200: Excellent

Ending Time E.S.T.	PH	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
42.6	B	00 03E	-26 30	0	2.21	B0	50	D.C. Morton → #5 (3) 2416 2419	fine
50	C	WO 16W	-25 58	0	2.73	A	50	" EXP METER WILL NOT BALANCE → #5 (5) 2420 2425	Extremely comp weak
	A						5/5 C10 filter FOCUS 73		fogged
2 37	C	WO 07	+46 03	0→2	3.74	B3	12-12-12	Eg. Weitek (3½) 13¾ A. → #6 (60) 2433 2493	fine
3 3'	C	W2 03	47 41'	2→0	3.48	G5	12-12-12	" OK #6 (20) 2493 2583	(beautiful) fine
	C						3/3 ← no filter		
	A						3/3 ← C10 filter	prem ent 6¾	O.K.
01 22	B	WO 43	+10 20	0	5.8	F8	12-12-12	Std Vel #7 (3) 2545 2594	fine
2 47	C	WO 05	51 24	0	8.46	B3e	12-12-12	Cu - Be N.W. wind! FIELD DRAWK #9 (40) 2593 2633	fine
03 16	A	WO 20	52 15	0	7.5	0916	12-12-12	MK std (¼ worn) #9 (20) 2636 2656	fine
03 32	B	WO 36	"	4	"	4	12-12-12	" (¼ worn) #9 (13) 2656 2666	Luke
								DAWN	

57

Date 15-16 July/65 (Thurs-Fri) Observer SK-Tyse (SHK) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
391-3259	α CrB	15 33.1	+26 50		5-4-2	28"/20"		20h44m			0h55m W
3260	ε Vir	13 05	+11 9		5-5-2	28"		21h31			4h3m W
3261	161796	17 44.1	+50 5		6-6-2	20"		22h06			0h4m E
3262	ξ Dra	17 52.9	+56 52		6-4-2	20"		22h32			0h29m W
3263	9 Her	17 55.0	+37 15		5-6-2	30"		23h12			0h15m W
3264	45 Dra	18 31.9	+57 1		5-6-2	20"		23h55			0h37m W
3265	Ti Sgr	19 7.7	-21 5		5-5-2	28"		0h34			0h39m W
3266	χ Aql	19 44.5	+10 31		5-5-2	28"		0h57			0h41m W
3267	χ Cyg	20 20.9	+40 8		5-4-2	28"		1h27			0h6m W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 70 °F

Transparency Conditions VERY GOOD

Focus .....

Dome Temp. .....

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0h53mW		good	2.23	A0V			
		4h0mW		to v.g.	2.21	G9III			
								⊙ Moon comes up	
		h 11m E			7.5	F2Ia		+ Sky	
		0h17mW			3.9	K2III			
		0h55mW		V. Good	5.1	K1II	═══	flare observed, duration a few minutes, sky perf. t. electrons also E/K	
		0h50mW			5.4	F7Ib		+ Sky	
		0h50mW			3.3	F2II			
		0h41mW			4.2	K5		Clouds in NW appear	
		0h26mW			2.9	F8Ib		Cirrus all over sky	
								0208 — cum. from mult.	
								for spectrum.	

59

Date 18-19 July/65 Sun-Mon **Observer** SK-Jr se-Hi **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle East
392-3268	α Cr B	15 33.1	+26 50		5-4-2			21h11m			
-3269	θ Her	17 55.0	37 15		5-5-2			2135			
28502	HD161701 HP 6620	17 41.9	-14 42	Gr 40	IIaD	13	62°F	22 41 23	2327	A	
28503	HD173219	18 39.1	-07 13	"	"	17		23 48 58	01 43	B	
28504	HD204116	21 21.4	54 57	Gr 40	"	13		01 50 63	0355	C	
-B27	α Ser	15 39.3	+6 44		5-5-2			22h05			
28504T	Calibration Step Wedge for plates 28502-04										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 66°F

Focus

Dome Temp. 52

Transparency Conditions very transparent

Finding Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		1h22m W		v.bad	2.23	A0V		not photometric!	
		0h38m E	37° 6'		5.15	K1 I			
23 27	h	0 10 W	-14 33	0-1	6.0x	B9	18-18-18	B8-B9 gauss 6x	#8 (15) {2819 2834	fine
23	8	0-2 30	-07 08	(1	8.02	B IV pne	18-18-18	C1-B8 # 28	#9 {2836 2873	fine
23 55	L	0 20 1 W	55 14	0	7.34	B1Ve	18-18-18	1 #35	#9 {2874 2903	fine
		2h2m W			2.8	K2 III		definitely non-photometric	

61

Date 19-20 July 1965 Mun/Tue Observer Hb-Mse-Dt [SH] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28505	π Sco	15 52.8	-25 50	G40	IIaO b	13 xL	60°F	20 42 2	20 46	A	20° 22W
28506	δ Sco HR 6773	15 54.4	-22 20	G40	IIaO b	13 xL		20 52 6	20 57	B	W0 30
28507	HD 165814	18 02.7	-25 29	G40	IIaO b	13		21 07 34	22 15	C	00 1½E
28508F	focus test in in/out			G40	IIaO b	13				C	
28508	Luther 100 cm HR 6620	17 55.3	-24 24	G40	IIaO b	13 SHORT 30		22 22 30	23 22	A	00 3½E
28509	HD 161701 HR 7511	17 41.9	-14 42	G40	IIaO b	13		23 39 10	23 58	B	W1 46
28510	HD 186547 HR 7514	19 40.0	+13 03	G40	IIaO b	13	55°F	00 07 2	00 22	C	W0 13
28511	HD 176318	18 54.6	38 07	G40	IIaO b	13	54°F	00 26 4	0 37	A	W1 13
28512	15 Vul	19 59.0	+27 29	G10	IIaO unbaked unpotted	9 xL	54/50°F	00 45 90	03 45	C	W3 23
28512 T1	Calibration Step Wedge for plates 28505 - 11										
28512 T2					28512						
28512 T3	Test			G40	IIaO b	30 xS	54°			A	
T4	Focus Test			G40	"	30	"			B	

Dome Temp. Focus 67 Dome Temp.

photometric, but no dry ice left.

Dome Temp. 68°F
Focus 67/651
Dome Temp. 52°F

Transparency Conditions ... good

62

Ending Time E.S.T	PH.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	00h 22m W	-25 59	0	2.73	B1V	40	D.C. Motor from set: 67 #5 (W) {2918 2922	fine
	B	W0 30	-22 30	0	2.21	B0V	40	" " #5 (W) {2922 2926	Latent
22 15	C	00 34E	-25 28	0	6.7	138	12-12-12	B8-B9 #8 (10) {2927 2937	fine.
	C							S/N {G10 filter}	O.K
2	A	00 54E	-24 20	0	8.8	B2Ve	8-12-8	S+ faint Be [very short slit, extra wide] no comb & no ext.	very weak fogged
58	B	W1 46	-14 42	0	6.05	B9	12-12-12	B8-B9 (replaced defocused) #8 (10) {2941 2951	fine
22	C	W0 13	+13 14	11	6.07	B8	12-12-12	B8-B9 FIELD DRAWN from set: 65 #8 (10) {2951 2961	fine
11	A	W1 13	38 13	0	5.7	B8	12-12-12	B8-B9 #8 (10) {2962 2972	fine
1	C	W3 20	+27° 39'	0-2	4.7	A5m ML	12-12-12	Eq. to idle (Yip) [this star was carefully guided! #7 (10) {2976 3136	fine.
								(DAWN)	
								#28572 broke during exposure.	
					0300:	quite a bit of low fog in the dome.			
		Focus 66					32s		OK
		In-2/1st. Ex					20/20		2 wks 02

63

Date 20-21 July 65 Tues-Wed Observer Cu-Mac-Ob Julian Day

Dome Temp. Focus 68.5 Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28513	π Sco	15 [illegible]	-25 50	G40	IIa-O	13L	63°	20 38	20 42	A	W0 22
28514	δ Sco	15 54.4	-22 20	G40	IIa-O	13L		21 15	21 18	B	W0 57
28515	Wolf. 40	47 58.3	-24 24	G40	IIaO	SHORT 30	62°F	21 44	22 46	C	W0 22
28516	BD +10° 3774	18 59.4	+10 58	G40	IIaO	17	-58	22 52 45	00 22	A	W0 57
28517	HD 193516	20 15.5	+37 28	G40	IIaO	17	57	00 29 24	01 16	B	W0 35
28518	BD +43° 3913 HD 213307	21 21.3	44 01	G40	IIaO	17	57°F	01 24 28	02 20	C	W0 37
~~28520~~	~~δ Cep B~~	~~22 25.4~~	~~57 53~~	~~G40~~	~~IIaO~~	~~13~~	~~56°F~~			B	
28519	BD +45° 3656	21 57.1	+47 42	G40	IIaO	17		02 24 24	03 12	A	W0 48
28520	HD 212883	22 22.4	36 57	G40	IIaO	13	56°F	03 25 5	03 35	B	W0 47
28521	ν Peg	23 20.4	+22 51	G40	IIaO	13	11	03 39 2	03 43	C	E0 03
28522	ν Peg	23 20.4	+22 51	G40	IIaO	13	11	03 44	03 45	A	0 00
28522T	Calibration Step Wedge for plates 28513-22										

Dome Temp. 67°/=

Focus 68.5/68/66.5

Dome Temp. .....

Frank came + fixed handswitch.

lift RA guide motion shorting intermittent

Transparency Conditions Excellent - but with occasional cloud & haze (all nite.) (up to 21:30)

64

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1 42	A	WO 22	-25 58	0	2.73	B1 V	40	D.C Mean (focus 68.5 ↑2) ⑥ {3203 #5 {3207	1 strong
8		WO 57	?	0	2.21	B0 V	40	D C Mean replaced due #5 {3212 3216	1 strong guiding
2 46	C	WO 22	-24 20	00	8.8	B2 Ve	10-10-10k	faint Be Trouble cleared fine (focus 68.5)	fine
3 22	A	WOO 57	+11 05	0-1	9.66	B1.5 V	12-12-12	Cu Be ft emp : ⑳ 3223 #9 3243	weak
1 16	A	WO 35	37 40	0-1	9.46	B2 III e	12-12-12	Cu Be (focus 66.5↑) ⑳ 3244 #9 3269	fine
								emp. mtr remained once off of while are on - 5 extra counts.	
2 20	C	WOO 37	44 17	0-1	9.43	B1 5U grnne	12-12-12	Cu - Be Field drawn ⑳ 3270 #9 {3290	fine
					6.3	B7 5U		IDF #7 ⑳ {3311 3315	
3 12	A	WOO 48	48 01	1	9.23	B3e Stu-E	12-12-12	Cu - Be ⑳ 3290 #9 {3310	fine
3 35	A	WO 47	37 15	2	6.2	B2	40	B-tape std vel (Cu) ③ 3310 #7 {3313	fine
3 43		EO 03	23 13	2	25.6	F8 IV	40	MK std. 3/4 norm ③ 3313 #7 {3318	fine plate
3 47	A	O 00		2	"	"	40	"FINDER" 1/3 norm ㉕ 3318 FIELD #7 {3320.5	1 weak
					REQUIRED			FOR Sep. (IDF)	

180 visitors. showed ∝ Her ABCD ∝ M13 Rc, Ck, Sm.

65

Date July 24/25, 65. Observer Rc - Dm Julian Day

Sept / Sun.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T. (middle)	Ending Time E.S.T.	P.H	Hour Angle End
393-1	∝ Lyr	18h 57.6	32° 38		B1/B2	A5	B3	00h 03	17h 56		
-2	+32° 4365	19h 31.8	+32° 40'		C2	B5	C2	00h 27	20h 21		
-3	M2-e	21h -	-0° 58'		D4	D4	D6	01h 05	20h 37		
-4	M2-a	"	"		D4	D4	D6	01h 25	21h 28		
-5	10 Lac	22h 37.6	+38° 52'		B2	A5	B2	01h 56	21h 49		
-6	i Peg	22h 05.3	+25° 9'		B3	B2	B5	02h 10	22h 03		
-7	M2-b				D4	D5	D6	2h 28	22h 22		
-8	M2-g				D5	D5	D6	2h 52	22h 45		
-9	i Psc	23h 38	+5° 2		B4	B3	B6	03h 14	23h 08		
-10	θ And	00h 15.2	+38° 29'		D4	B3	B6	3h 27	23h 21		
-11	ν And	00h 42.8	+40° 53'		B3	B2	B4	3h 36	23h 30		

Dome Temp.
Focus
Dome Temp.

Dome Temp. 67°

Focus .....

Dome Temp. .....

Transparency Conditions ..... Seeing V. good - Stellar images < 8" of arc

Hour Angle End	Declination	~~Tm~~ Seeing	Ptg. Mag.	Sp.	~~Sky~~ Comp.	REMARKS	~~Image~~ Quality
		~~Emphasize G~~					
		10					G
		30			✓	Deflections do not repeat well	G
		50					G
		60				—	G
		30					G
		10					G
		100				seeing getting poor	G
		50					G
		10					G
		10					
		10					
						✗ DEC Slow motion (photometer)	
						BURTON STICKS	
						The salt in photometer's bag is red!	
Shall we put bag on when photometer full of dry-ice?							

67

Date July 25/26 1965 Observer SH SL MSE Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	H	Hour Angle End
394-3971	α CrB	15h33.1	+26° 50′		5-4-2	28′		20h56			
28523	HR6773 HD165814	18 02.7	-25 29	G40	IIaD	13	72°F	21 36 30	22 36	A	
24	HR6620 HD161701	17 41.9	-14 42	G40	IIaD	13		22 43 14	23 15	B	
25	HR7511 HD186547	19 40.0	+13° 03′	G40	IIaD	13		23 28 17	00 01	A	
26	HR7174 HD176318	18 54.6	+38 07	"	"	"		0 20 4	0 28	C	
27	HD193516	20 15.5	37 28	"	"	17		0 39 45	2 10	B	
28	HD211835	22 14.9	+45 18	"	"	"	62°F	2 15 41	3 36	C	
28528T	Calibration Step Wedge for plates 28523-28										

Dome Temp. Focus Dome Temp.

Dome Temp. 74°

Focus

Dome Temp.

Transparency Conditions widely scattered clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			2.23	A0V		Clouds	
						focus set: 71 1/2	
W 1 11	-25 28	0	6.7	B8	12-12-12	B8 - B9	not able to balance fine
W 1 27	-14 41	0	6.05	B9	12-12-12	"	#7 {3454 3458 (4) fine
W 0 20	+13 14	0	6.07	B8	12-12-	" Visual Binary? 4"? ~ "pair on Focus	{3456 3462 (5) fine
W 1 29	+38 14	1	5.7	B8	36	"	#7 {3460 3463 (3) fine
W 1 49	37 40	1	9.46	B2Ve	12-12-	12 Cm - BC	#9 {3464 3484 (20) guiding
W 1 17	+45 39	0	8.49	B3Ve	12-12-12	" focus set 67	#9 {3484 3504 fine

FRANK
~~THE RED WARNING LIGHT FOR EXP. MTR IS BURNT~~
OUT OR LOOSE

69

Date 26-27 July 1905 Observer L-Hse. Julian Day

Mon & Tues

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28529	β Dra	17 28.2	52 23	G40	Ilford	1.3	68°F	20 33	20 36	A	E 13
30	"	"	"	"	"	"		20 37	20 40	B	E 10
31	α Dra	17 30.3	+52 38	"	"	"				C	E 37
32	"	"	"	"	"	"		20 57	20 58		
31	HD 186547	19 40.7	+53 03	"	"	"		21 16		A	
32											
28530	Calibration Step Wedge for plates 28529-30										

70

Dome Temp. 73°F

Focus 70

Dome Temp.

Transparency Conditions considerable clouds

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E0 53		.1	23-8	G2 II	40	MKoSTd. (1/2 norm) (from 70) #5 {3640 3642	fine
E0 50			"	"	40	" (1/4 norm) #5 {3642 3643	hunk
E0 37 ~~+12 35'~~						~~Too hard (1/2 norm)~~ ~~#5~~ {~~3644~~ ~~3645~~
						~~" (1x norm)~~ ~~#5~~
	~~+13 14~~		~~6.07~~	~~B8~~		~~B8-B9~~ clouds #7 {36

Ending Time E.S.T. P.M.

71

Date 27-28 July/65 Tues & Wed Observer L. Hse Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle Bird
28531	ζ Here	16 16.7	46 33	6/40	103a-o	13	69°F	20:36.30	20 39.00	A	W 25
28532	ν Oph	17 30.3	+12 38	"	"	"		20 45	20 46	3	E 043
33	"	"	"	"	"	"			20 49	C	E 040
34	HD161701 HR6620	17 41.9	-14 42	"	"	"		20 55	21 09	A	E 033
35	HD 145001	16 03.6	+17 19	"	"	"	68°F	21 14	21 34	B	W 30
~~36~~											
36	HD171780	18 31.6	34 22	"	"	"	66°F	23 06	23 13	C	W 04
36	Blank plate		51					17		A	
37	HD174239	18 44.5	+52 53	"	"	"		23 22	23 30	A	W 00
38	HD176318 HR 7174	18 54.6	38 07	"	"	"		23 36	23 45	B	W 53
39	HD186547 HR7511	19 40.0	+13 03	"	"	"	63°F	23 47	24 00	C	W 22
40	BD +43°3913	21 21.3	44 01	"	4	17	62°F	0 09	02 25	A	W 11
41	HD 211935	22 14.9	+45 18	"	"	"	56°F	02 32	03 26	B	W 19
28542	HD 217811	22 58.2	43 31	"	"	13	54°F	03 32	03 49	C	W 58
28543	w² Aqr	23 37.5	-15 06	"	"	"	54°F	03 15	03 58	A	E 22

Dome Temp. 72°F

Focus 70½ / 69½ / 68½ /

Dome Temp. .....

Transparency Conditions scattered clouds

2100: clouds in N & S; w clear

0130 Northern lights.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
W 25	46° 24'	0	3.89	B5V	40	M4. S.D. (¼ norm) focus 72½	#5 (2) 3697 3693½	[illegible]
E 0 43	+12 36	0	2.24	A5III	40	" (½ norm)	#5 (1) —	[illegible]
E 0 40	"	0	"	"	"	" (¼ norm)	#5 (2) —	[illegible]
E 0 33	-14 42	0⁻	6.05	B9	40	B8-B9	#7 (3) 3696 3699	[illegible]
W 1 30	+17 10	0	6.1	G4	12-24	S+d. Ge/ clouds overhead	#7 (6) 3799 3701.5	[illegible]
						clouds		
00 45 W	+34 27	0⁻	5.48	B3e (III-V)	12-24 12-	Ca-Be focus 64½	#7 (3) 3707 3710 ~~#7 (3) 3711~~	[illegible]
00 49 W	+52 57	0⁻	5.81	(III-V) B3e	12-24	Ca Be	#7 (3) 3712 3715	[illegible]
W 0 53	+38 13	0⁻	5.7	B8	12-24	B8-B9	#7 (3) 3716 3719	[illegible]
W 0 22	+13 13	0⁻	6.07	B8	12-12-12	B8-B9 focus 68½	#7 (3) 3719 3722	[illegible]
W 0 26	+44 18	0-1	9.43	B9V pane	12-12-12	Ca-Be	#9 (2) 3727 3747	[illegible]
W 1 19	+45 38	1	8.49	B3:Ve	12-12-12	Ca-Ba focus 66	#9 (3) 3717 3767	[illegible]
W 0 58	+3 52	0⁺	6.1	B3	12-24	B type st. nd. focus 65	#7 (3) 3768 3771	[illegible]
0 23 W	-14 45	0	4.62	B9.5V	40	Mk. Std. (½ norm)	#5 (4) 3775 3776	[illegible]

73

Date 28 July 65 Observer M. se-Cu Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28544	ω^2 Aqr	23 37.5	-15 06	Grism	IIa-D	13		04 00	04 02	B	1126W
28544 T_1	Calibration Step Wedge	for	plate	28531-43							
28544 T_2	"	"	"	28544							

Dome Temp. 54°F

Focus

Dome Temp.

Transparency Conditions

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
52	B	00 26W	"	0	4.62	39.50	40	NH .5 1d. (1/4 worm) #5 (1/2) {3776 3776½	weak

Date 24-25 July /65 Observer Hyde-Rc-Yp Julian Day
Wed-Thurs

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28545	+10°45'001/6	03-6	+17·19	G40	IIaD	13	62°F	20 26	20 36	C	W0 3P
28546	μ Her	17 42.5	+27°47	G40	IIaD	13	62°F	20h 40	20h 42	A	E0 5P
28547	"	"	"	"	"	"	"	20h 44	20h 46	B	E0 1
28548	89 Her	17h 51.4	+26°04	"	"	"	62°F	20h 51	20h 55	A	E0 5
28548T	Calibration Step Wedge for plates 28545 – 48										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 66°F

Focus

Dome Temp.

Transparency Conditions clouds

Ending Time E.S.T.	P.P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	C	W0 38	+17° 09	0	6·1	G4	12-12-12	Std. Vel. focus @ 7½	fair
		E0 54	+27° 45'	0	4.14	G3½	40	MK. Std. (½ norm	fair
		E0 57	"	0	"	"	40	" (¼ norm)	dark
	A	E0 50	+26° 03'	0	5·47	F2 Ia	40	" (¼ norm)	dark

77

Date 29-30 July/Aug Thurs-Fri Observer Hd, Mac / Hd, Mac Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28548A	ε Her	17 36.6	+40 04	Gr 10	unfiltered IIaO	9xL	64°F	20 19 40	21 38	C
28549	110 Her	18 41.4	+20 27	Gr 10	unfiltered IIaO	9xL	60°F	21 50 123	01 56	B
28550	α Lyr	(1960) 18 35.6	(1960) +38 45	Gr 10	IIaO	9		02 29	0230	C
~~28551~~	~~α Lyr~~	18 55.6 1950	+38 45 1950							B
28552	γ Peg	00 10.7	+14 54.3	Gr 10	unfiltered IIaO	9xL		02 47 17	03 21	B
28552	"	"	"	"	"	"	53°F	03 22 14	03 49	C
28552T	Calibration Step Wedge for plates #28548-49, 51-52									

Dome Temp.
Focus
Dome Temp.

Hour Angle End
W 12
0325 W
0408 W
E0 23
E0 10

Dome Temp. 66°F

Focus .....

Dome Temp. 54°F

Transparency Conditions good (clouds around horiz.)
2200 - getting thick in S&E.

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	C	W 0 12	46 02	1	3.79	133	12-12-12	Eq. Width (Hyp) [PLATE IN EXP. BROKE]	fine
	A	0325 W	+20 31	0	4.26	F6	12-12-12	" " "	flocculent
	C	0408 W	+38 46	0-1	0.04	A0	36	Std. Vel.	grainy
				"	"			ONLY 1 BAKED PLATE	
	A	E 0 27	+14 58	0-1	2.9	B2.5	12-12-12	Eq Width (Hyp)	fine but not as the
	C	E 0 10	"	"	"	"	12-12-12	"	fine

#16 (60) {4001 4061
#16 (60) {4062 4152
#4 (3) {4161 4176
#6 (60) {4177 4237
#6 (60) {4238 4298

FRANK:
Fixed it OK.
THE GROUND WIRE ON THE SLOW MOTION HAND BOX HAS COME LOOSE.

79

Date 30-31 July/65 Fri/Sat Observer Hb - Dt Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28553	110 Herc	18 41.4	+20 27	G10	IIaO	9xL	66°F	20 29 156	01 01	B	02 35W
28554	HD 198183 MWC352	20 43.5	+36 07	G10	IIaOb	9	59°F	01 13 35	02 22	C	01 53W
28555	γ Peg	00 8.1	+14 38	G10	IIaO	9xL	58°F	02 38 12	03 02	B	00 51E
28556	φ Per	01 37.4	+55 11	G10	IIaOb	9L		03 19 23	04 04	C	01 17E
28556T	Calibration Step Wedge for plates 28553-55										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 66°F

Focus .....

Dome Temp. 58°F

Transparency Conditions — Cirrus in west; 80

2215 overcast (Ac) thin partially clearing (2240)
0000 THIN CLOUD COVERING MOST OF SKY
0200 scattered Ci; good

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 01	B	02 35W	+20° 31′	0-1+	4.26	F6V	12-12-12	Eq. Width Prog (Y1p) Seems good at beginning	#6 {4302 {4384	Lweak
02 22	C	01 53W	+36° 23′	0-1	4.5	B6e	12-10-12	Spec. Stan for G10 FIELD DRAWN	#6 30 {4385 {4415	fine
03 5-	B	00 51E	+15° 00′	1+	2.9	B2.5IV	12-12-12	Eq. Width Prog (Y1p)	#6 60 {4416 {4476	fine
04 0-		01 19E	+50° 30′	0-1	3.95	B0p	12-12-12	Spec. Stan for G10	#4 25 {4477 {4492	grading

The baked and unbaked plates are separated in the "exposed plates" box: unbaked on left (head of arrow)
baked on right (tail of arrow)

Visitors Hb, CC, V

(81)

Date Sat July 31/Aug 1/65 Observer L - Db Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28557	MWC 317 HD 183143	19 23.0	18 05	G 40	IIAob	13L		23 27 51	01 09	A	2 04W
28558	371 205060	21 27.7	42 16	"	"	"		01 17	01 55	B	0 45W
28558T	Calibration Step Wedge for 28557-58										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 65° who changed to G10 and bent the Focus Shutter ???? LONGWORTA 1982

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
01 09	A	2 04W	18 14	0	6.9	B9.5e	12-12-12	Be Prog	H7 {4496 4502	fine
01 55	E	0 45W	42 33	0	7.1	B5ne	12-12-	" "	"7 {4503 4505	fine
								Clouds Star gone at 1.55	

83

Date 3-4 Aug/Sept 65 Tues / Wed Observer Hd Sy / Rf Julian Day

Dome Temp. Focus 67 Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28558 F	focus test	in in / out out		G10	IIaD	9	64°F			C	
28559	σ Boo	14 30.3	+30 11	G10	IIaD	9	64°F	20 21 63	2 2 27	C	W4' 27"
						17 Cm					
28560	HD 173219	18 39.1	−7 13	G10	IIaD	~~13~~	60°F	22 47 37	0 0 00	A	W1 50
28560T	Calibration Step Wedge 28560										

Dome Temp. 69°F

Focus 67

Dome Temp.

Transparency Conditions widely scattered clouds.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
C						3/3	no fillts D-19 (4 min)	d c to v;
2 27 C	W 4M 27	+29 55	1	4.48	F2 V	12-12-12	Eg. Width some clouds. Baked plate; regular length. #5 {4653 4687.8	fine
0 0 C	W 1 50	−7 07	0	8.02	B.V	8, 8½, 8	CnTBa Field (drawn) does not agree with #28503 clouds #9 {4688 4700	weak

clouds at 2330; waited but became completely overcast

NEW EKP. MTR INSTALLED. +H2

85 **Date** 4-5 Aug/65 Wed-Thurs **Observer** Cu Shu Hsi **Julian Day**

Dome Temp. Focus Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
~~28560~~	~~HD 161701~~ HR 6620	~~17 44.9~~	~~-14 42~~	~~C40~~	~~Tech~~	~~13~~	~~64°F~~	~~20 42~~	~~21 02~~		~~0 26~~
61	〃	〃	〃	〃	〃	〃	〃	21 04	21 20	B	W 20
28562	BD +10° 3774	18 59.4	+10 58	C40	Tech	17	63°	21 24	23 00	C	W 34
28563	BD +23° 3761	19 41.2	+24 04	C40	Tech	17	60°F	23 13	00 43	A	1h 15
	Checked telescope for [illegible] Very heavy dew. OK.										
28564	HD 204116	21 21.4	-5 57	C40	Tech	17	68°	00 51	01 14	C	W 17
28565	BD +17° 3856	21 57.1	+17 42	C40	Tech	17		01 21	02 13	C	W 51
28566 T	Calibration Step Wedge for plates 28561-65										

Dew Heavy 4 AM Now & again Mtr reverses [illegible] work [illegible]

Wet [illegible] [illegible] [illegible]

All in now [illegible]

Dome Temp. 68°F

Focus 69/67

Dome Temp. ....

Transparency Conditions foggy HAZY OTHERWISE PERFECT VERY DARK HORIZON!

02h Fog moving in VISIBILITY = 40°

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	~~00 07 E~~	~~-14 42~~	~~0~~	~~6.06~~	~~B9~~	~~12-12-12~~	B8-B9 capping device not attached	
	W0 20	"	"	"	"	"	"	guiding
	W0 34	+11 06	1	9.66	B5.IIIne	-12-18	Cu Be	weak
	W01 35	+24 16	0-1	9.49	B0.IIIe	12-12-12	" "	weak
	W00 27	+55 14	1	7.34	B3.Vne	12-12-12	Cu Be Focus 67 field shift	fine
	W00 50	+48 00	1	9.23	B3.5Vne	12-12-12	Cu Be 02:10 fog 02:13 - getting thicker - closed up FAST!	guiding

Hb - showed emission near (~60)

87 **Date** 5-6 Aug / 65 Thurs / fri **Observer** Hd Hb Sy-Hse / Hb, Sy-Hse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28566	HR 6620 HD 161701	17 41.9	-14 42	G40	IIaOb	13	67°F	21 08 8	21 24	A	
28568	HR 7179 HD 176318	18 54.6	38 07	G40	IIaOb	13		22 10 4	22 18	A	
28567	HR 7514 HD 186547	19 40.0	13 03	G40	IIaOb	13		21 49 6	22 01	C	
28569	HD 184467	19 29.5	58 24	G40	IIaOb	13		22 25 19	23 02	B	
28570	HD 193516	20 15.5	37 28	G40	IIaOb	17	63°F	23 12 40	01 12	C	
28571	HD 204722	21 25.5	+43 54'	G40	IIaOb	13	60°F	01 37 23	02 22	B	
28571	E2.			G40	"	"					
28570F	focus test in/out/out			G40	IIaOb	13				A	
28570	— indicated time in error by about 4 min — reset										

Dome Temp. 70°F

Focus .....

Dome Temp. .....

Transparency Conditions fog as last night 88

New exp. meter will not quite balance out the dark current. at sens. 80 on the print star the ratio dark current / dark current + * = 25/90.

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 11		W 20m	-14°42'	0	6.05	B9	40	BE 134 (16) sens 80 / 7 counts apparent = 7 × 05/90 = 5 real counts	dev. weak
2 18		00 02W	+38 13	0	5.7	138	40	" (16) now almost exactly in balance sens 200 / 2 counts	fine
2 [illegible]		01 20E	+13 14	0	6.07	B8	12-12-12	" (16) (naked eye) sens 200 / 12 counts.	dev. weak
3 3 [illegible]		WO 12	58 30	0-1	7.5	K5	12-12-12	S + d. Vel. sens 200 / 30 counts	fine
01 12		01 35W	+37 39'	0	9.46	B2 Vine	12-20-12	Cn Be Prog. 2 Hrs sens 1000 / 36 counts	fine
								CHECKING TELESCOPE FOR MOISTURE	
2 22		01 35W	+44°12'	0	7.64	B2 Vine	12-20-12	Cn Be Proc. sens 400 / 32 counts	good
		MOISTURE FREE						TELESCOPE (UPPER END)	
									focus obv
4		Re Exp MTR: BALANCE WAS CHANGEABLE EVEN AT SENS. 400 — COUNTS FOR PLATE 28569 WILL BE MEANINGLESS					3/3	Cn 10 hrs FOR # 28569 impossible to balance dark current at any sens + obtain intelligent counts with — possibly due to high [illegible] Note to Joan: # 25566 developed — a little strong (N.G.)	

Sat. Aug 8/65 74 Visitors showed Ranger VII & Universe
Hb, Dm, GO

89 Date Aug 9/10 1965 Observer SD MSE Julian Day

Dome Temp.
Focus 72
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
2857 F2	Focus	in in/out out	out	G40	11a0b	13	74° 23.3C			A	
F3		in in/out out		G40	11a0b	13	74°			B	

Dome Temp. 76

Focus 72 1/2

Dome Temp.

Transparency Conditions for Mon-Tues Aug 9/10 cloudy 90

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A							focus set wrong ~~74~~ 78 center to west	
	B							focus set 72 1/2	O.K.

RA unclamp switch shorted

DC volts at 90 called L.

91 **Date** Tues Aug 10-11/65 **Observer** Hd-DC/Hk/Hse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28572	HD 161701 (HR 6620)	17 41.9	-14 42	G40	IIaO B	13	62°F	20 35	20 54	A	W0 08
28573	HD 165814 (HR 6773)	18 02.7	-25 24	G40	IIaO b	13		21 01	21 30	B	W0 23
28574	HD 170235	18 23.2	-25 19	G40	IIaO b	13	59	21 39	22 05	C	
28575	HD 173219	18 39.1	-7 13	G40	IIaO b	17		22 20	23 10	A	W1 27
28576	HD 187691	19 46.2	+10 09	G40	IIaO b	13	58°F	23 15	23 31	B	W1 41
28577	HD 186547 (BR 7511)	19 40.0	+13 03	G40	IIaO b	13		23 35	23 48	C	W1 05
28578	HD 198931	20 48.6	+4 03	G40	IIaO b	17	57°F	23 56	01 38	A	01 47 W
28579	HD 235665	21 53.1	51 06	"	"	"		01 56	02 45	B	W1 10
28580	HD 213224	22 24.8	+57 55	G40	IIaO b	13	54	02 51	03 03	C	W1 38
28581	HD 9812	01 30.8	58 08	G40	IIaO b	13	54°F	03 10	03 32	A	E1 02
28582	HD 8179	01 21.4	-00 55	G40	IIaO b	13	54°F	03 38	04 18	B	E0 06
28582T	Calibration Step Wedge for plates 28572-82										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 62 — 0100 Thin Cloud — Full moon — 92

Transparency Conditions good; extremely poor seeing

Focus 68½ / 67/65

Dome Temp. .....

PERSEIDS

Comparisons a little weak 12-17

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]		W 0 08		0	6.05	Bq	12-24	B8-B9 bin. 10cm ← Lens 200.	fine
[illegible]		W 0 23	-25 27	0	6.7	B8	12-12½	B8-B9 bin. Lens 200/12	weak
[illegible]		W 0 38	-25 16	~	6.7	B-V III-V	12-12½	Cr-Bc Lens 200/12	weak
[illegible]		W 1. 27	-07 08	0	8.02	B-V	12-12½	Cr-Be reset focus 67./ Lens 400/24	weak
[illegible]		W 0 45	+10	0	5.8	F8	18-18	Std. Vel. Lens 200/24	fine
[illegible]		W 1 05	+13 14	0	6.07	B8	12-12½	B8-B9 200/12	fine
[illegible]								capping during game apart: flash tube jogged.	comps fair grinding
[illegible]		0147W	+44 19	0	9.3	B-V III-V	12-12½	Cr-Bc #33 1000/60	fine
[illegible]		W 1 50	51 24	0-1	8.46	B2e III-V	12-12½	CN-Be #38 G 1000/60	grinding
[illegible]		W 1 35	58 13	0	8.4	A0	18-18	~~[illegible]~~ P03 SV3 L4 focus 68 200/12	fine
[illegible]		E 1 03	58 26	0	7.4	B5 V	12-12½	B type Std. Vel. 400/24	grinding
[illegible]		E 0 06	-0 35	0	7.5	K0	12-12½	Std. Vel. 400/F8	fine
								DAWN	

6PM EST Dome opened

18:00

93 Date 11-12 Sept/65 Wed & Thurs Observer Sy, Hze/HB (Mcd) LV Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle Est
	Hg d testing filter in after exposure started							20:30			
28583	HD 172694	18 36.5	-15 57	G40	IIaOb	17	66°F	20 48 26	21 40 57	A	W 0 03
28584	130 +10° 3774	18 59.4	+10° 58'	G40	IIaOb	17		21 51	23 45	B	W 1 47
28585	HD 204116	21 21.4	5'4 57	G40	IIaOb	13		23 56 26	00 47	C	W 0 27
28586	HD 217811	22 58.2	43 31	G40	IIaOb	13	60°F	00 57 9	01 15	A	E 0 11
28587	(HD 213307) X 5 Cyg C B	22 25.4	57 53	G40	IIaOb	13		01 21	01 33	B	W 0 06
28588	HD 211835	22 14.9	45 18	G40	IIaOb	17	59°F	01 38 21	02 20 37	C	W 1 04
28589	HD 220116	23 16.1	57 43	G40	IIaOb	17	58°F	02 24	03 37 6	A	E 0 22
29590	HD 16219 HR 760	02 31.1	39 27	G40	IIaOb	13	57°F	03 42	03 54 4	B	E 1 36
28591	14 Ari	02 03.7	+25 28	G40	IIaOb	13		03 57	04 04 2	C	00 45 E
28592	"	"	"	"	"	"		04 07	04 10	A	00 51 E
28592F	Focus Test			"	"	"	57°F			B	
28592T	Calibration Sky Wedge for plates 28583-92										

Dome Temp. 72°F

Focus 69/67

Dome Temp.

Transparency Conditions good - some cirr

several meteors - mucco

2015 - broken Ci covering most of sky (1-2 mag absorption)

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 0 03	-15- 52	0	8.31	B0e	12-12-12	Cu-Be from 69	400/24	grinding
01 47	+11 05	1→0	9.66	B1.5Ve	12-12-12	Cu Be linear "s"	800/48	fine
W 0 27	+55 14	0	7.34	B1Ve	15-15-15	Cu-Be	400/24	fine
E 0 42	+43 53	0-1	6.1	B3V	15-15-15	Beta + tel. cor. (from 67) field from	200/12	
W 0 06	58 12	0-1	6.3	B7V	15-15-15	1 DF	200/12	fine
N 1 04	45 37	0-1	8.49	B3Ve	15-15-15	Cu-Be	800/48	fine
01 23W	58 04	0-1	9.28	B9.5V	15-15-15	Cu-Be focus 66	1000/60	
E 1 36	39 44	0	6.35	B8	15-15-15	B8-B9 (d+e)	200/12	fine
00 48E	+25 48	0	5.01-2	III	45	M.H. Std. (1x norm)	200/24	fine
00 54E	+25 48	0	6	II	45	II (1/2 norm)	200/12	fine
					4-44	G10 filter		O.K.

generally bad work

95

Date Aug 13 – 14 **Observer** Longworth - SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
395 – 3272	α Lyr	$18^h 25.7$	$+38°45'$	4-5	-2	28″		$20^h 45^m$			
	ζ Lyr	19 15.2	+38 4								

Dome Temp.
Focus
Dome Temp.

Dome Temp. 75°F

Focus .....

Dome Temp. .....

Transparency Conditions ..... extremely hazy

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0h18m W		Med.	0.03	A0 V		Sidd extremely hazy, clouds appear	
					4.3	K0 III		clouds – FINIS	

97) 180 visitors — showed after M6, M13 Cl, Sm. Difficulty with R.A. clamps

Date Aug 14/15 1965 Observer SL RT Julian Day

Dome Temp. Focus Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28593	HD 176318 HR 7174	18 54.6	+38 07	G40	IIaO 6	13	74°	23 11 8	23 26	A	1h 45m W
28594	δ Cyg B	22 25.4	+57 53	G40	IaO 6	13		23 44 8	24 00	B	1h 5m E
28595	HD 235668	21 53.1	+57 06	G40	IaO 6	17	73°	0 34 47	2 08	C	1h 9m
28596	HD 217883	22 22.4	+36 57	G40	IIaO 6	13	70	2 23 8	2 39	A	1 : 4
28597	HD 217811	22 58.2	+43 31	G40	IIaO 6	13		2 50 10	3 10	B	2h 1m
28598	HD 220116	23 16.1	+57 43	G40	IIaO 6	17	69	3 29 30	4 29	C	2h 1m W
28598 T	Calibration Step Wedge for plates 28593-598										

Dome Temp. 78°
Focus 72/71/70
Dome Temp. 72

Transparency Conditions scattered clouds
moon 3 days past full
haze on horizon
clouds at 1:20

Cut slot on exp. meter box on telescope inadvertently turned.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1h 45 W	+38 14	0	5,7	B8	12-12-12	B8-B9 exp. meter could not be balanced	fine.
1h 22 E	+58 12	0	6·3	B7 IV	12-15-15	JDE	fine
1h 29 W	+51 24	1	8.46	III-V B2e	12-12-12	Cn Be exp nearly bal 200	fine & weak
1 10 W	+37 17	0	6.2	B2V	12-12-12	B standard Velocity exp nearly bal 200/11	fine & weak
1 28 W	+43 53	0	6.1	B3V	12-12-12	"	fine
2 26 W	+58 10	0	9.28	B0.5V	12-12-	Cn Be May be the wrong slot	two weak

DAWN

THE VISITOR'S EYEPIECE has been moved (17)
~~has been moved~~ ~~check slit~~ ~~Visual plate in fog~~

99

Date 13/16 Aug/65 Observer (SK 116) mse SK mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
3246	3273	α Lyr	18h35.7	+38°45'		4-4-2	28"		20h19		
	3274	ζ Lyr	19 15.2	+38 4		6-4-2	28"		21h03		
	3275	16 Sgr	18 29.8	-19 9		7-5-3	20"		21h30		
	3276	FF Aql	18 56.7	+17 19		6-5-3	20"		22h03		
	3277	β Sct	18 45.3	-4 47		6-5-3	28"		22h31		
	3278	45 Dra	18 31.9	+57 1		6-5-2	28"		23h01		
	3279	31 Cyg	20 12.5	+46 37		5-6-2	28"		23h26		
	3280	32 Cyg	20 14.4	+47 36		6-5-2	28"		0h00		
	3281	γ Cyg	20 20.9	+40 8		5-5-2	28"		0h26m		
	3282	41 Cyg	20 27.9	+30 15		5-6-2	28"		0h52m		
	3283	ξ Cyg	21 11.2	+30 3		5-5-2	28"		1h15m		
	3284	ξ Cep	22 9.6	+58 01		5-6-2	28"		1h40m		
	3285	δ Cep	22 27.8	+58 14		5-6-2	28"		2h03m		
	3286	ρ Cas	23 52.3	+57 19		6-5-2	28"		2h46m		
	3287	22 And	0 8.5	+45 53		6-5-2	28"		3h09m		
	3288	β And	1 7.8	+35 26		5-5-2	28"		3h43m		

Dome Temp. ____
Focus ____
Dome Temp. ____

Dome Temp. 93°F

Focus .....

Dome Temp. .....

Transparency Conditions ..... Very good
a few clouds at horizon dissolving
cirrus 23 x 30
again 2200

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0h37m E		poor	0.0	A0V			
	0h43m E			4.3	K0III			
	0h32m W			7.0	G0Ib var	+ Sky	Moon rising	
	0h36m W			5.8	F7Ib var	+ Sky		
	0h44m W			4.5	G5II			
	1h58m W			4.9	F7Ib		clouds appear in south	
	0h45m W			4.0	K3Ib			
	1h16m W			4.2	K5Ib		completely clear again	
	1h36m W			2.3	F8Ib			
	1h54m W			4.1	F5II-III			
	1h38m W			3.4	G8III			
	1h1m W			4.9	K1Ib		clouds forming in south	
	1h6m W			4.3	F8Ib var	+ Sky		
	0h17m W			5.5	F8Ia p	+ Sky	completely clear again, Moon risen	
	0h32m W			5.4	F8II			
	0h6m W			3.8	M0III			

101

Date 16 August 65 Observer MSE-SK Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
396-3289	{And	2h 1.8m	+42°10'		5-5-2	28μ		4h06m		
396-3290	α Ari	2 5.2	+23 7		5-5-2	28μ		4h33m	4 ~3	

Dome Temp.
Focus
Dome Temp.
Hour Angle End
0h4m E

Dome Temp. 66°F

Transparency Conditions .....

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 24m E			3.60	K3II	+		
			2.2	K3II			

103

Date 7-12 Aug 1960 Observer L mse (DL) - HL mre Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
		(1960)	(1960)								
28599	α Lyr	18 35.6 / 18 33.5	+38 47 / +38 41	G40	IIaOb	10	74°F	21 00	21 01	D	E
28600	"	"	"	"	"	4		21 02	21 03	B	W
28601	"	"	"	G10	"	9		21 25	21 37	C	W
~~28602~~	~~HD 17 863~~ HR 841	~~19 01~~	~~+18 54~~	~~G40~~	~~IIaOb~~	~~13~~					
28602	HD 212883	22 22.4	+36 57	G40	IIaOb	13	70°F	0 02	00 22	B	CO
28603	HD 217811 HR 8761	22 58.2	+43 31	"	"	"	68	01 09	01 32	C	
28604	HD 219749 HR 881	23 13.2	+44 57	"	"	"	"	01 38	02 01	A	
28605	HD 1042 HR 760	01 36.6	+60 [illegible]	G40	IIaOb	13		02 09	02 38	B	
28606	HD 16234	02 31.1	+39 37	G40	IIaOb	13		02 40	03 20	C	
~~28607~~	~~HD 9812 HR 444~~	~~01 30.8~~	~~+58 08~~	~~G40~~	~~IIaOb~~	~~13~~					
28607	HD 23324 HR 1146	3 39.2	+24 32	G40	IIaOb	13		03 25	03 50	A	
28608	HD 23363	03 39.5	-01 29	G40	IIaOb	13		03 56	04 16	B	
28608	focus test in/out			G40	IIaOb		65°F			C	

Dome Temp. 79°F 0300: fog Transparency Conditions cloudy

Focus ..... EXP MTR DOES NOT FUNCTION AT SETTING 1 x 100 (runs to 1/2)

Dome Temp. 67°F

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		E 0 01			005	A0V	50	Hubc focus 7 x 50	40/3.2	string
		W 0h 01	+38 46				50	"	40/3.2	string
		W 0h 30					30	Std. Vel.	40/50	string
								shutter closed EXP MTR SET AT 2 2 30 (700 v.		
					6.32	B3		B8-B9 B8 slow slow motion and working		
		00 35E	37 16	0	6.2	B2V	15-15-15	B Std. Vel. (runs 7) 200	15"	fine
								G40 capping device has come apart.		
		00 01E	43 53	0	6.1	B3V	15-15-15	B Std. Vel. 21003	200/	fine
		00 13W	45 20	0	6.3	B9	15-15-15	B8-B9	2 yel. 1	fine
		01 23E	60 22	0	5.73	B9	15-15-	B8-B9 (dve)	200/	fairly
		01 17E	39 44	0	6.35	B8	15-15-15	B8-B9 Exp mtr will not [illegible]	200/	fine
					14	B5V		B Std. Vel.		
		E2 25	24 43	0	5.58	B8	15-15-15	B8-B9 (dve)		fairly
		E 1 53	-1 15	0	5.04	B8	15-15	B8-B9 (dve)		fine
							5/5	no plate		

105

Date 19 Aug/Aug 20 Thurs-Fri Observer mcl-DT (2) mcl-Sh K mcl Julian Day

Plate No.	Object	R.A. 1900	Declination ~~1900~~	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Middle Time E.S.T.	P.H
397-1	HR 6629	17 46.2	+02 43		t=20sec				20 27	
-2	HR 7069	18 45.5	+18 28		"				20 47	
-3	HR 7178	18 57.6	+32 38		"				21 06	
	~~HR 7~~									
-4	HR 7235	19 03.8	+13 49		"				21 40	
-5	HR 7377	19 23.7	+3 02		"				22 01	
-6	HR 7235	19 03.8	+13 49		"				22 26	
-7	HR 7525	19 ~~46~~ 46	+10 31		"				22 55	
-8	HR 7377	19 23.7	+03 02		"				23 17	

Dome Temp. From Dome Temp. Mid- Hour Angle

COULD WE PLEASE HAVE A LONG PENCIL FOR THE DOME?

Dome Temp. .....
Focus .....
Dome Temp. .....

Transparency Conditions .....

M, D —

Hour Angle E end	Declination	Seeing	V.S Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W D			3.74	A0V		+ SKY	
E 23			4.37	A3V		C4, B5, B6, B6, C2, C3 + SKY	
E 16			3-30	B9III		C2, B2, B3, B4, B4, B4 + SKY	
						COULD NOT FIND NGC 6482.	
W 11			3.02	A0V		B6, B2, B3, B4, B4, B4 + SKY	
W 13			3.44	F0III		C2, B3, B5, B5, B5, B6, C2 + SKY	
W 58			3.02	A0V		B6 B2 B3 B4 B4 B4 B6 B6 + SKY	
						REPAIRS TO FOCUS SHAFT MECHANISM.	

note to Gerry: the chain linking the motor for focusing is off — this was replaced, but it is still likely loose, & should be fixed or this will happen again (I suspect this came off last night)

W 55			2.80	A3V		C2 B3 B5 C3 C3 C4 C6	
W 28			3.46	F0V		C2 B3 B5 B7 B5 B6 C2	

107

Date..... Observer Mc Donnell, Mose, Stk Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T. (MD)	P.H
397-9	Pollux	20 18.8	+12 54		t=60 sec				23 45	
-10	NGC 7332	22 35.7	+3 37		100 sec				0 34	
397 -11	HR 7235	19 03.8	+13 49		t=20 sec				1:07	
397 -12	HR 7525	19 44.6	+10 13		"				1:22	
397 -13	HR 7525	19 44.6	+10 13		"				1:39	
-13	HR 7235								1 54	
-14	HR 7525								2:08	
-15	[illegible]	[illegible]	[illegible]		[illegible] sec				2:18	
-16	HR 8969	23 [illegible]	+05 27						2 50	
-17	HR 9088	00 02.3	26 55		"				3 05	
18	HR 27	00 08.5	45 53		"				3 21	
19	HR 63	00 15.3	30		"				3 40	
20	HR 8969	23 38.1	+05 27		"				4 03	
21	"	"	"		"				4 25	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ... good (poor, hazy)

108

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W1 02						D6 D3	
E0 25			11.8	G3		D6 D5 D6 D6	
W3 40			3.02	K0 II		B6 B2 B3 B4 B4 B4 B6	
W3 53			"	"		" " "	
W3 38			2.80	K3 I		C2 B3 B5 C3 C3 C5 C6	
						B6 B2 B3 B4 B4 B4 B6	
W4h00						C2, B3, B5, C3 C3 C5 C6	
W4 09						" " " " " " " 45/F4	
W0 48			4.28	F7 V		C4, B5, B6, B6 C2, C3, C3	
W0 41			5.85	G2 V		C6, C3, C5, C6, C5, C6, C6	
W0 46			5.1	F2 IV		C4, B5, B6, B6, B6, C2, C3	
E0 100							
W 200			4.25	F7 V		C4, B5, B6, B6, C2, C3, C3	
W2 2[illegible]			"	"		" " " " " " "	

109

(SK)

Date Aug 20/21 Observer Sd (RC) Sy (LV) Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28609	HD 212883	22 22.4	+36 57	6 40	11a0 1b	13	62	0:01 (21)	0 42 (28)	A	0 01 E
28610	HD 219749	23 13.2	+44 57	640	11a0b	13	60	0:59	1 54 (31)	B	0 38 E
28611	HD 9812	01 30.8	+5 8°08	640	11a0b	13	58°	228	3 30	C	0 24 W

Dome Temp.
Focus 68/
Dome Temp.

Dome Temp. 62°

Focus 68/66

Dome Temp. 58

Transparency Conditions cirrus → cloud 1110

very poor seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0.01E	+37 16	O	6.2	B2V	12-12-12	B-type Std Val seeing very poor ~~Difficult to guide Wobble star~~ setting Ok fine.	
0 18E	+45 17	O	6.30	B9 p	12-12	12/B8-B9 Hδ	fine.
0 24W	+58 27	O	7.4	B5V	12-12	Std Val	guiding.

Please for exposure meter can not calibrate it i can not take any more Std with[out] reciprocity 1/2 & 1/4 & normal under adverse conditions Ed

NOTE: Exposure meter sticky from 1/2 scale on & completely stopped by even for bright stars Trouble with (West) dome button (Turning dome west) 8

111

Date 22/23 Aug 1952 Observer SHK MSC Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28612	HR 6620 HD 161701	17 41.9	-14 42	G40	103a-O	13	64°	20:20	20:36	A
28612F	focus test in in/out				"	"	"			C
28612T	Calibration Step Wedge for plates 28609 - 12									

Dome Temp.
Focus 71
Dome Temp.

Dome Temp. 70°F

Focus 71

Dome Temp. .....

Transparency Conditions heavy cirrus in west at start

NO EXP. MTR.

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	A	W 0h 37m	- 14° 46'	0	6.05	B9	6 (G10 filtes) B8-B9	½ Hr exp (focus 71) Clouds	weak
	C						3/3 (G10 filtes)		and/or mod

113

Date 23-24 Aug/Sept 65 **Observer** MSe - SK **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
28613	α Lyr	18h 35.7m	+38° 45'		Tri-X	0		20 37		1	W 06m
398-3291	"	"	"		4-4-2	28"		20 59			29m W
-3292	u Sgr	18 29.8	-19 9		7-5-3	20"		21 24			6m W
-3293	γ Aql	19 24.7	+0 15		6-5-2	20"		22 13			55m W
-3294	[illegible]	19 37.9	+16 39		7-5-3	20"		22 43	22 51		1h W
-3295	187209	19 46.9	+24 54		7-5-3	20"		23 18			1h 35m W
-3296	η Aql	19 50.7	+0 55		6-4-2	20"		23 37			1h 57m W
-3297	35 Cyg	20 17.3	+34 52		6-5-2	20"		0 08			2h 27m W
-3298	200465 + Cyg	21 0.7	+39 20		6-6-3	20"		0 31			2h 57m W
-3299	209693	22 3.1	+32 4		6-6-3	20"		1 30			3h 45m W
-3300	5 Lac	22 28.1	+47 31		6-5-3	20"		2 00			4h 15m W
-3301	δ Cyg + Cyg	22 27.8	+58 14		6-5-3/2	20"/28"		2 28			4h 43m W
-3302	HR 8736 + Cyg	22 54.9	+49 33		6-5-3	20"		3 12			5h 27m W
-3303	218634	23 7.8	+8 29		6-6-3	20"		3 54			6h 09m W
-3304	α Per	3 21.9	+49 44		4-6-2	28"		4 29			6h 44m W

Dome Temp.
Focus
Dome Temp.

Dome Temp. 70°F

Transparency Conditions very good.

Focus .....

Dome Temp. .....

Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 0h 06m			6.03	A0 Ia		1-1 wire (focus 70 (900 V) 40/3.2	fair
0h 29m W				//			
1h 6m W			7.5	F1 Ib var	+ Sky		
0h 50m W			4.9	F2 Ib	+ Sky		
1h 10m W			8.4	K5 Iab	+ Sky	} Zero - Varies somewhat	
1h 33m W			8.7	G5 Iab	+ Sky		
W 0h 57		good	4.5	G0 Ib v			
W 1 47			5.9	F2 Ib	- Sky		
1h 30m W			7.9	K2 I	+ Sky		
1h 28m W			7.5	G5 Ia	+ Sky		
1h 35m W			7.0	K7 Ib			
2h 7m W			4.5	var G Ib var			
2h 19m W			6.8	K2 Ib	- Sky		
2h 47m W			6.6	K0 I	+ Sky		
0h 57m E			2.3	F5 Ib			

115

Date 24-25 August 1965 Observer SK Mse RC - SK SLH Julian Day

Dome Temp. Focus 70 Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
399-3305	α Lyr	18 33.6 18 35.7 (1960)	+38° 41' 38° 45'		4-4-2	28"		20:26			
28614	"	"	"	Gr 0	IIaDb	7	68°F	20 55		A	W
28615	"	"	"	"	"	"		20 58		B	W 0H 20
28616	HD 171391	18 29.5	-11 03	"	"	13		21 10	21 30	C	W 0H SL
28616T	Calibration flip Wedge			for plates 28613-16				-			

Dome Temp. 70°

Focus 70/

Dome Temp.

Transparency Conditions

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				0.03	AO I		Zero somewhat unstable; Clouds in N	
9	W			-		5-0	Hale (focus 70) 46/9.2	fine
10	W 0M 20			"		"	40/3.2	fine
1 20	W 0M 5-2	-	0	5.2 g67	15-30	Std. Vel.	clouds 200/~~74~~19	Cirrus
							closed up 22:15	

117

Date 26 Aug 27 Aug 1965 Observer mse SK Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
400-3306	α Lyr	$18^h 35.7$	$+38° 45'$		4-5-2	28"		$10^h 44$	$2^h 24^m$	W
	α Sge	19 38.2	+17 56							
	47 Cyg	20 32.3	+35 4							

Dome Temp.
Focus
Dome Temp.

Dome Temp. 68°F

Focus .....

Dome Temp. .....

Transparency Conditions ..... very hazy

118

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
1:24	W			good	0.03	A0 V		condensations + clouds appear in W	
					5.1	G0 Ib-II			
					6.1	K3 Ib			

Saturday, Aug 28/65 Hb, Dm, Sd ~160 visitors - showed Albireo through the 74" telescope and Ranger VII film.

119

Date 29 - 30 Aug/65 **Observer** Sd - MS **Julian Day**

Dome Temp. Focus 65 Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle Est
28617	HD 169820	18 21.4	+14 55	G40	IIa-D	13	54°F	19 48	20 04	A	E0 06
28618	HD 155711	17 08.2	52 32	"	"	"	"	20 11	20 30	B	W1 34
28619	HD 164467	18 29.5	58 24	"	"	"	53°F	20 36	21 46	C	W3 26
28620	HD 174239	18 44.5	52 33	"	"	"	50°F	21 57	22 04	A	W1 33
28621	HD 213307	22 25.4	57 53	G40	"	"	50°F	22 27	22 42	B	E1
28622	HD 212593	22 20.4	+48 58	G40	"	"	48°F	22 52	22 57	C	E1 10
28623	HD 212593	22 20.4	+48 58	"	"	"		23 00	23 05	A	E1 03
28624	BD+47°3656	21 57.1	+47 42	"	"	17	48°F	23 25	01 53	C	W2 09
28625	HD 216628	22 49.4	61 36	"	"	"	49°F	02 14	04 41	A	W3 52
28626	Calibration Step Wedge for plates 28617-25										

Dome Temp. 58 °F

Focus 65 # 63½

Dome Temp. 42 °F !!

Transparency Conditions clear a & SW

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
E0 06	+14 58	0	6.43	B9	15-15-15	B8-B9 (dve) (form 65) #200/15	fine.
W1 34	52 27	0	6.11	B9	15-15-15	B8-B9 (dve) #200/15	fine.
W0 26	58 31	0	7.5	K5	15-15-15	Stel. Vel. #400/60	fine.
W1 33	52 56	0	5.81	B8 III-V	15-15-15	Ca-Be form 63½ #200/15	plate slightly fogged
E1 31	58 13	0	6.3	B7 IV	15-15-15	VDF 200/15	grinding fine
E1 10	+49 17	0	4.6	cB8	15-15-15	B8B9 100/8	fine.
E1 03	+49 17	0	4.6	cB8	15-15-15	B8B9 100/8	fine.
W2 08	+48 00		9.23	B3e III-V	15-15-15	Ca-Be 800/60	fine
W3 54	61 56		~~10.03~~ 9.5	~~B2e~~ B0 V	15-15-15	Ca-Be very FAINT! form 61 ↑ FIELD DRAWN 800/60	weak.

WED. 7:30 - DOME 043 UNLOCKED - use

Date 1-2 Sept 65 Observer md - md Julian Day

121 Wed - Thurs

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
401 - 1	HR 8143	21 16.0	+39 15		t=20 sec			22 43		
- 2	HR 8115	21 11.5	30 05		"			23 03		
- 3	NGC 6482	17 50.4	+23 05		t=1 min					
- 4	NGC 7626	23 19.0	+08 01		t=200 sec			00 40		
- 5	NGC 7619	23 18.6	08 00		"					
- 6	HR 8143	21 16.0	+39 15		t=20 sec					
- 7	HR 8115	21 11.5	30 05		"					
- 8	NGC 7742	23° 42.6	+10° 34'		t=200 sec					

Dome Temp. Focus Dome Temp. At D Hour Angle

Dome Temp. 60°F

Transparency Conditions Some cum at first then very good

Focus

Dome Temp.

A & D

Ending Time E.S.T.	Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality
							(N3N)	(N3W)	45'	42	41	38	35'	
	E3 06			4.25	B9		C3	B4	B6	B6	B6	B6	C2 +	sky
	W0 19			3.4	A8II		C2	B3	B5	C2	C2	C3	C3+	sky
				12.2	G0		D6	D6	D6	D6	D6	D6	D6+	sky
	E0 10			12.7	G5		D6	D5	D6	D6	D6	D6	D6	"
				12.9	G5		D6	D5	D6	D6	D6	D6	D6	"
				4.28	B9		C3	B4	B6	B6	B6	B6	C2	"
				3.4	A8II		C2	B3	B5	C2	C2	C3	C3	"
				12.2	G0		D6							

123

Obs mse Hr mse

Date 2-3 Sept/65 Observer Dm - Dm Julian Day

Thurs - Fri

MIDDLE

Plate No.	Object	R.A. 1900	Declination 1900	Inst X	Emulsion G	Slit U	Temp.	~~Starting~~ Time E.S.T.	~~Ending~~ Time E.S.T. L.S.T	P.H	Hour Angle End
402-1	HR 6775	18 056	30 34	B5'	B5'	C3		20H 08m	18H 38m		
-2	M13 #1	16 40.5	36 32	D3	D3	D5'		20 32	19 03		
-3	13° 4065	19 31.8	+03 40	C2	C1	C2	64°F	21 06	19 36		
-4	HR 6775	18 05.6	30 34	B5'	B5	C3		21 19	19 50		
-5	HR 6869	18 19.4	-02 54	B2	B2	C2		21 30	20 01		
-6	HR 7061	18 44.1	+20 31	B3	B3	C2		21 38	20 09		
-7	M2 - e	21 31.6	-00 58	D4	D4	D6		21 57	20 23		
-8	M2 - b	"	"	D3	D4	D6	62°F	22 13	20 54		
-9	HR 6775	18 05.6	30 34	B5'	B5'	C3		22 47	21 18		
-10	HR 7602	19 53.5	+06 18	B3	B3	B6		22 59	21 29		
-11	HR 7906	20 37.9	+15 47	B2	B2	B4		23 05	21 35		
-12	HR 7924	20 40.1	45' 09	A2	A2	A4		23 13	21 43		
-13	M2 - a	21 31.6	-0 58	D4	D4	D6		23 26	21 52		
-14	M2 - h	"	"	D4	D5	D6		23 59	22 30		
-15	HR 6775	18 05.6	30 34	B5	B5	C4		00 19	22 50		

20:20 · SOME CIRR ... S. 9 ia.

Dome Temp. 68 °F

Focus .....

Dome Temp. .....

Transparency Conditions good

Channel 1 only

Channel 2 = A2

124

T

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Sky Comp.	REMARKS	Graph. Quality
		10 S	5.04	F7V	✓		G.
		50 S			✓	cirr over Hercules	11
						γ in S, W. γ 11 W	
		30 S	6.82	—	✓		
		10 S	5.04	F5	✓		
		10 S	3.26	K0IIIJ	✓		
		11	4.20	F6V	—		
		60			✓		
		120			✓		G
		10	5.04	F7V	✓		
		11	3.71	G8IV	—	INTEGRATOR CONDENSER ACCIDENTALLY DISCHARGES BEFORE PRINTING	
		1.	3.77	B9V	—		
		11	1.26	A1Va	—		
		70					
		100					G
		10	5.04	F7V			

125

Date Sept 2-3/65 Contd. Observer DM-MSE-HR Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
				y	B	y			L.S.T.		
402-16	HR 7924 α Cyg	20 40.1	+45 09	A2	A2	A4		0030	2300		
" -17	HR 7949 ε Cyg	20 44.8	33 50	A5	A5	B5		0036	2307		
" -18	M2-g	21 31.6	-00 58	D4	D4	D6		0104	2335		
" -19	M2-j	"	"	D6	D6	—		0126	2357		
" -20	M2-b	"	"	D6	D6	—		0147	0018		
" -21	HR 7924 α Cyg	20 40.1	45 09	A2	A2	A4		0204	0035		
-22	POLARIS	01 57	~89	A4	A4	B3		0226	0057		
-23	α UMi in B	"	"	B3	C2	C5'		0239	0110		
-24	"	"	"	C3	C2			0308	0139		
-25	λ Cepb	22 10.2	59 14	B5'	B5'	B5'		0322	0153		
-26	10 Lac	22 37.6	38 52	B5'	B4	B5'		0330	0201		

use C3.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ....3 5 - as last of Aug not photometric anymore 126

Hour Angle End	Declination	T Seeing	Ptg. Mag.	Sp.	SKY Comp.	REMARKS	DIA. Quality
		10	1.26	A_2Ia			G
		10	2.05	K_0III			G
		80^s			✓		G
		110^s					E
		110^s					E
		10	1.26	A_2I_2			G
		"					
		30			✓	fairly heavy fog measured reflection only	G
		"					
		10	5.04	06 f			
		11	4.88	09 III			

127

Date Sept 3/4, 1965 Fri-Sat **Observer** Hb, Shk **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28626	HR6990 HD171961	$18^h 32^m 4$	-23° 36'	G40	IIaOb	13	65°F	19 41	20 11	A
28627	γ Lyr	18 55.2	+32 33	G40	IIaOb	13	65°F	20 20	20 23	B
28628	" HR7174	"	" 51	G40	IIaOb	13	"	20 26	20 27	C
28629	HD176318	18 54.6	+35° 07	G40	IIaOb	13	"	20 43	21 08	A
28630	δ Cyg	19 41.8	+44 53	G40	IIaOb	13	64	21 14	21 15	B
28631	HD190603	20 00.7	+31 53	G40	IIaOb	13	63°F	21 21	21 30	C
28632	α Del	20 36.0	+15 34	G40	IIaOb	13		21 40	21 43	A
28633	"	"	"	"	"	"		21 47	21 48	B
28627	Calib. from plate 28626	for wide	NOTE -33	The plates are all out of order						
403-3307	α Lyr	18 35.7	-38 45	4-5-2		28"	62°F	$21^h 59^m$		
3308	47 Cyg	20 32.3	+35 4	6-5-2 13		28"		22 30		
3309	ξ Cyg	21 3.4	+43 46	6-5-2		28"		23 08		
3310	HR 8374	21 52.3	+61 20	7-5-3		20"		23 41		
3311	Cep	22 27.8	+58 14							
3312	21 47.6	22 58.6	+56 45							

Dome Temp.
Focus
Dome Temp.

Hour Angle
End

Dome Temp. 66°F

Transparency Conditions Poor. Cirrus most of sky

Focus .....

Dome Temp. .....

2000 viewed mag. absorption - deteriorating

2130 almost clear

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		00 10E	-23° 30'	0	5.73	B9	15-15-15	B8-B9 Prog. Xmitter not running 10:00/8	weak
		0	+32° 41'	0	3.20	B9 III	22-22	MK Standard	strong
		00 04W	"	"	3.20	"	45'	"	fine
		00 45W	+38° 15'	0+	5.7	B8	15-15-15	B8-B9 (dve) binary CLOUDS	fine
		00 06E	45 04	0	2.82	B9.5 III	45'	MK Standard 1/4 NORMAL	strong
		00	32 08	0	5.7	B1.5 Ia	15-15-15	MK Standard 1/2 NORMAL [DELAY expanded mirror] comparison on west/east	
		00 21E	15 48	0	3.77	B9 V	45'	" " 1/2 NORMAL	strong
		00 26E	"	0	"	"	45'	" " 1/4 NORMAL	fine
		the exposed plate box also covered probably							
		2h 14m W			0.03	A0 V		cirrus at Bk. Loma, hazy	
		0h 44m W			6.2	K2 Ib	+ Sky		
		0h 50m W			5.3	K5 Ib			
		0h 31m W			7.7	G8 Ib	+ Sky	Clouds	
					5 Var G va. Ib				
					6.3	[illegible]	+ Sky	2nd: definitely solid cloud layer	

Saturday, Sept 4/65 (HB), Dm, (Ho) showed Ranger VII film to appx 90 visitors (half of first group saw Moon through 74")

129

Date Sun Moon **Observer** SK Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
4044-3311	Tested for ∝ Lyra – sky failed – no go again									K
	20-21 Sept Moon - Tests			Mse – Gr	Mse – I-s					
28634	BD+37°3761	19 41.2	24 09	G40	Ea 20	17	74°F	20 49	22 51	A
28635	BD+47°3481	21 32.1	+47 28	"	"	"	72°F	23 01	01 23	B
28635T	Calibration Step Wedge			for plates 28634-35						C

Dome Temp.
Focus
Dome Temp.

Hour Angle End
190

Dome Temp. .....

Focus ..... SEPT. 20-21/65

Dome Temp. .....

Transparency Conditions Very hazy ... very humid

TEMP + Humidity Too High for Id of EX. MTR. IP21 Too High To BALANCE AT -600#.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
very humid - weighting - wet in the dome							
170 visitors IEEE - partly cloudy. demonstrated telescope Cu							
02 49	+21 15	1	9-4	B0 2C	15-15-15	Cu-Be [illegible]	weak
0331W	47 46	1	9.80	3pe	15-30	Cu-Be "	weak

00HO THIN CLOUDS
HID STAR GONE

Saturday Sept. 11/65 (Hb), Rc, Ck showed Albireo (β Cyg) to about 50 people inside first room and ~60 people (Deaf group) in the second.

131

Date Tues Sept 21/22 '65 Observer L - Db - Rc - mac Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End
28636	HD 198931	20 48.6	44 03	C 40	IIaO B	17	76°	21 06 65	23 16	A	2 11 W
28637	HD 4382	00h 41 1	+74° 18'	G40	IIaO B	13	72°	01 09 12	01h 33	B	0 31 W
28638	HD 4382	"	"	"	"	"	"	02h 11 5	2h 21	C	1h 21 W
28639	HD 10390	01h 36 3	+38° 04	"	"	"	70°	3h 16 4	3h 24	A	1h 36 W
28639T	Calibration Step Wedge for plates 28636-37										

Dome Temp.
Dome Temp.
Dome Temp.

Dome Temp. .....

Focus ..... UNABLE TO BALANCE EXP. MTR.

Dome Temp. .....

Transparency Conditions ..... Poor

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
23 16	A	2 11W	44 18	1	9.31	B1 Km	15-15-15	Cn Be Clouds at end of exp.	fine.
01 23	B	0h 33W	74° 39'	0	5.4	B9	15-30	B8-B9 pm focus 72	fair
								01 34 - stars gone - ie: clouded in again	
		1h 42W	74°39'	0	"	"	15-30	B8-B9 pm	guiding
								more cloud	
3 1-	A	1h 36 W	35°04'	0	5.4	B9	10-15	B8-B9 pm most clouded cloud - completely covered sky again	fine.

Saturday Sept 18 Sm, (Pc), Go Showed Universal to two groups.

133 Date Wed Sept 22/23 Observer Hd Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp. 25°C	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28639 F	focus test in in / out out			G40	IIIa Db	13	77			A
28640	HD 31774 HD 31363.8	18 54.6	38 07	G40	IIIa Db	13	"	18 54	19 02	B
28641	B Oph	17 38.5	+4 37	"	"	13		19 11	19 13.	C
28642	"	"	"	"	"	"		19 14	19 15	A
28643	8 Her	17 52.8	37 16	G40	IIIa Db	13		19 21	19 31	B
28644	"	"	"	"	"	"		19 32	19 37	C
28645 T	Calibration Step Wedge				for plate 28640			-44		B

Dome Temp.
Focus
Dome Temp.

Hour Angle End

W 29
W 12
W 24
W 30

Dome Temp. 84°F

Focus 73½

Dome Temp.

Transparency Conditions

UNABLE TO SEE EXP. METR.

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							5/5 ← 6-10 plates focus 73½		
9 02	B	E 5m	38 14	1	5.7	B8	15-15-15	B8-B4 Bin: X meter not balanceable.	Lucerke fine.
9 33	C	W 1 20		1	3.93	K2 III	6-10 plates 5	mx sky cirrus ↓	
9 55	A	W 1 23m	+4 37	1			5	"	Lucerke fine.
10 21	B	W 1 24	37 16		~5.0	K1 III	5	"	Lucerke fine.
10 37	C	W 1 30	"		"	"		"	

Joan: ~ 5 plates on the right with in comp. plate box #1 (in refrig.) are too short for the plateholders.

135

Date Thurs Sept 23/24 61 Observer Rc – Mc/HS Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
~~28645~~	~~BD+47° 3913~~								middle	
403a- (1)	1+R 39	00 11.4	+1500		T = 20s				0h 32m	
" (2)	"									
(3)	HR 9088	00 00.3	+26 55		20s				01 14	
~~4~~	~~NGC 185~~	~~0h 37.0~~	~~+48 09'~~							
4	M31	0h 40.9	+41 05		T = 20s				0212	
5	NGC 278	0h 50.1	+47°23'		T = 60s				0302	
6	HR 37	00 11.4	+1500		T = 20s				0352	
7	NGC 821	2h 06.5	+10°51		T = 60s				0425	
8	HR 9088								0504	

Dome Temp.
Focus
Dome Temp.
Hour Angle
middle
0h 15m W
01 14 W
02 12 W
03 02 W
03 52 W
04 25 W
05 04 W

Dome Temp. 71°

Focus

Dome Temp.

Transparency Conditions

Ending Time E.S.T.	P.M.	Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		middle						well that as far as I got – it just clouded in	
		0h 15 W						B6, A2, A4, A4, A4, A3, A3	
		0108W						C-3, B-4, B6, C2, C2, C2, C3.	
		0125W						D4, C5, D3, D4, D4, D5, D6	
		0206W							
		0335W							
		0213W							
		0457W							

137

Date Sept 24/25 Fri/Sat Observer HB / CN Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28645	δ Cep B	$22^h 25^m.4$	57° 53′	G40	IIa-O	13	54°F	22 25	22 48	A
~~28646~~	~~BD+62°2041~~	~~22 49.4~~	~~61 36~~	~~G40~~	~~IIa-O~~	~~17~~				~~B~~
28646	HD 212097	22 16.7	57 50	G40	IIa-O	13	54°F	22 51.5	23 00	B
28647	"	"	"	"	"	"		23 01	23 10	C
28648	HD 7019	01 5.5	37 12	G40	IIa-O	13	52°F	23 21	23 36	A
28649	BD+63°418	00 21.0	63 52	G40	IIIa-O	17	52°F	23 46	02 46	B
28650	HD 14422	02 14.7	+56 56	G40	IIa-O	17	46°	02 55	05 15	C

Dome Temp.
Focus
Dome Temp.

Hour Angle
End

Dome Temp. 51 °F

Focus 65

Dome Temp. .....

Transparency Conditions Good (clouds on S horizon) Overcast early in evening 3-138
2240 some clouds coming in from NW
0h good.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11 44	.00 15W	+58° 12'	0	6.3	B7 IV	15-15-15	JDF rec	fine
				10.03	B2 pe		Cn Be sky not likely to remain clear	
11 53	00 38W	28 10	0-1	4.9	B8n	15-15-15	B8-B9 extension	fine
11 10	00 48W	28 10	0-1	4.9	B8n	5-15-15	"	fine
23 36	01 35E	37 34	0	5.7	B8	5-15-15	B8-B9	fine
23 46	02 20W	64 14	0-1	10	B1nne	15-15-15	Cn Be field drawn EXP MTR WILL BALANCE COUNTS EXTREMELY SLOW ON FAINT STARS	fair weak
0 5	02 53W	+57 13	0-1	9.58	B1 Ipe	15-15-15	Cn Be Focus 62 field drawn 990	Excel

Cu, Rc ~180 visitors showed M57 Ring Nebula

139

Date Sept 25/26 last-Jan 1965 Observer Cu - L - St Julian Day

Dome Temp.
Focus 65
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28651	BD +43 3913	21 21.3	+44 01	G 40	IIa 06	17	54	21 08 55	22 58	A	0 35 W
28652	HD 216~~29~~ 58	22 49.4	+61 36	G 40	IIa OB	17	51	23 07	02 23 45	B	03 33 W
28653	HD 14422	02 14.7	56 56	G 40	IIa OB	17		02 42	04 12 24	A	01 51 W
28654	HD 36665	05 28.3	27 59	"	"	"		04 22	05 04	C	0 26 E

Dome Temp. 58°

Transparency Conditions Excellent

Focus 65

Dome Temp.

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	[illegible]	01 35 W	+44 19	1	9.43	B1.5V; prime	15-15-15	Cu Be field check. 800/60	fine
[illegible]	[illegible]	03 33 W	+61 57	1	9.5 ~~9.03~~	B0 V ~~B2 pe~~	15-15-15	Cu Be From 63.5 field ck 400/160	plate fogged; fine
[illegible]	A	01 50 W	57 14	1	9.58	G1 V pe	15-15	15 Cu Be 800/60	fine
05 04	C	02 6 E	28 03	1	8.40	B1 ~~III~~ V	15-15-15	Cu Be 800/60	fine

141

Date Sun Sep 26-27/65 Observer Hd — Hr Julian Day
Dm Dm

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28655	HD176318	18 54.6	+38 07	G 40	IIaO B	17	43	19 54	20 04	A
					Y	B	U	EST	L.S.T	
404 1	α Cyg.	20 40.1	45 09		A2	A1	A4	21 02	21 12	
404 2	ε Cyg	20 45.7	−9 38		B3	B2	B5	21 17	21 22	
404 3	M2 — e	21 31.6	−0 58		D3	D3	D5	21 49	21 54	
404-4	M2 — a				D3	D4	D6	22 11	22 16	
404-5	M2 — b				D4	D4	—	22 35	22 40	
404-6	α Cyg	20 40.1	45 09		A2	A1	A4	22 48	22 53	
404-7	61 Cyg A	21 05.2	38 33		B3	B4	C4	23 05	23 10	
404-8	61 Cyg. B				B5	B6	C6	23 18	23 23	
404-9	M2 — g	21 31.6	−0 58		D3	D3	D5	23 39	23 44	
404-10	α Cyg	20 40.1	+45 09		A2	A2	B4	0123	0129	
404-11	γ Peg	00 11.3	+14 59		A5	A4	A5	0132	0138	
28656	BD+57° 612	03 07.3	+59 33	G 40	IIaO b	17	36°	0303	0503	A
28650T	Calibration Log Change				for plates 28645-56					

Dome Temp. 42

Focus 61 (est) 58

Dome Temp.

Transparency Conditions good.

Clearing soon after sunset.

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	W 1 11	38 15	0	5.7	B8	15-30	B8-B9 binary Working alone – no time to grind properly 400/30.	fine
			time			sky		
	W 6 27m		10s					A
	W 35m		10s			✓		A
	W 33m		80			✓		G
	W 45m		80s			✓		G
	W 1h 09		120s			✓		G
	W 1h 13		10s					A
	W 1 04		30s			✓		G
	W 2 15		30s			✓		G
	W 2 12		90s			✓		G
	04 50 W		10s				Stopped Photometry ;/ high Id clouds #1	A
	0129W		10s					A
	0201W	+59 47	0	9.33	B1 IV pnne	15-30	CN-BE Ring. 800/22	

Hb, Rc, cc showed Moon, Saturn and "Universe" to at least 200 people

143

Date Sat/Sun Oct. 2/3, 1965 Observer Hb, Rc/L, cc Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28657	ε Peg A HD 206778	21h 39m.3	+09° 25′	G10	IIaOb	9	53°F	23 01 35	00 17	
				G40			53°F			

Dome Temp.
Focus
Dome Temp.
Hour Angle End
03 04

Dome Temp. 52°F

Focus 6.40, 21

Dome Temp. .....

Transparency Conditions Thin. Overcast at 2205h and clearing.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 04W	+09° 46′	0-1	3.86	K2III	12-12-12	Bright Std. Vel ~~Taken without filter by mistake~~ 200/500 Clouded over while changing cameras.	Lunar

145

Date 4-5 Oct/65 Observer Hall - Hobbs Julian Day

Mon - Tues

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28658	HD 212943	22 22.8	+04 12	G40	IIaO6	13	37°F	21 46 10	22 06	A
28659	BD +43°3913	21 21.3	44 01	G40	IIaO6	17	36°F	22 12 53	23 58	B
28660	B9 +63°48	00 21.0	+63 52	G40	IIaO6	17	34°F	00 07 55	01 57	C
28661	HD 235552	03 41.0	+50 26	G40	IIaO6	13	32°F	02 07 12	02 31	A
28662	HD 23662	03 41 8	+68 12	G40	IIaO6	13		02 41 10	03 01	B
28663	HD 26670	04 08.1	+01 36	G40	IIaO6	13				C
28664	HD 30085	04 39.4	+70 45	G40	IIaO6	13				A
28665	HD 32781	05 00.5	+76 21	G40	IIaO6	13				B
28662 T	Calibration Step Wedge for plates					28658 - 62				

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 42°F

Focus 5.9/5.8

Dome Temp. .....

2040 – broken Ac's covering most of sky windy

Transparency Conditions ~1/4 moon good (overcast earlier)

640 FOCUS WAS AT 21:—WHY???

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
2 [illegible]	A	W0 .16	+04 33	3 0→1	5.9	K0.	15-15-15	Std. Ori. focus 5.9 200/50	fine -
3 57	B	W3 of	44 19	0-/	9.43	B15 pmag	15-15-15	Cu - Be NECESSARY TO USE L CLAMP ~~200/25~~	weak
01 57	C	02 10W	64 15	0-//	10	Blue	15-15-15	Cu - Be FINDER FIELD CHECKS OK CLOUDS	weak
2 31	A	E0 36	50 37	0-1	5.87	B8	15-15-15	B8-B9 FIELD CHECKS OK 200/15	fine
03 31	B	E0 10	68 23	0	6.28	B8	15-30	B8-B9 200/~~X~~ 6 count only	weak
	C				5.9	B8		B8-B9. Solid overcast	
	A				6.37	B9		B8-B9	
	T				6.29	B9		B8-B9	

147

Date 6-7 Oct 65 Observer HD – Julian Day
Wed - Thurs

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28663	HD 212943	22 22.8	+04 12	G40	IIa-O	3	46°	20 37 8	20 52 1		E 49
28664	HD 193183	20 13.8	37 55	G40	IIa-O	13	"	21 00 16	21 32 13		W 2 0
28665	"	"	"	"	"	"	"	21 33 11	21 54	C	W 2 22
	"	"	"	"	"	"	"				
28666	J Cyg	20. 18.6	39 56	"	"	"	"	22 00 5	22 10		
~~28667~~	"	"	"	"	"	"	"				
28666T	Calibration Step Wedge										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 52°F

Transparency Conditions ... Cirrus

Focus .....

Dome Temp. .....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
[illegible]	E0 49	+04 32	2	5.9	K0	15-15-15	Std. Vel. focus 62	200/50	fine
[illegible]	W2 01	34 07	2→0	7.12	B1 SIb	15-30	11 x normal CHECK WITH M1 Std FINDER FIELD	200/15	fine
[illegible]	W2 22	"	0-1	"	"	45	1/2 normal M1 Std.	200/8	fine
								100/15	
				"	"		" (1/2 norm)	100/8	
				2.88	F8 Ib	—	" 1/4 (normal)	40/1 1/2 only	no comp strong
				"	"		" (1/2 norm) clouds - thick	40/3	

Jean: the field for #256 64 #5 should be checked

Checked HR

Sat visitors Oct 10 ~80 visitors - showed Universe Cm, Ck, CC

149

Date Oct 11/12 Mon/Tues 1965 Observer MCL Julian Day

Db
Cm

Plate No.	Object	R.A. 1900 1965	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
									middle		
405-1	γ Cyg	20 20.9	+40 08			20s			19 31		00 12W
-2	NGC 7332	22 35.7	+23 37			60s			20 03		0:11E
-3	γ Cyg	20 20.9	+40 08			20s			21 01		01 44W
-4	α Peg	23 03.0	+15 01			20s			21 32		00 27E
-5	i Psc	23 38.1	+5 27			20s			21 50		00 45E

Done Temp.
Focus
Done Temp.

Dome Temp. 530

Focus

Dome Temp.

Transparency Conditions Good. - full moon 150

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	Middle							
19 31	00 12W						A6 A3 A4 A5 A5 A6 B3	
20 03	02 26E							
21 01	01 44W							
21 32	00 27E							
21 50	00 45E							
							Clouds.	

Ast 210 showed Ring Nebula Hd, Cn, Rc, Hn

151

Dome Temp.
Focus
Dome Temp.

Date 12-13 Aug / Tues-Wed Observer L - H/R Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
28667	HD 223311	23 43.4	-06 56	40	IIaD	13	41°F	22 43 21	23 25	A	W 5°
28667T	Calibration Step Wedge										

Dome Temp. 41°F

Focus .....

Dome Temp. .....

WRONG - SHOULD PROBABLY READ -06° 34' (see #28732) — Hube Nov. 5/65

Transparency Conditions ..... poor - 2/3 sky covered + full moon lots cirrus

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
9 55		W 0 57	-06 26 00		6.3	gK4	15-15-15	Std. Vol. from 60" to 200/5 26 only	weak
								heavy clouds rising in	
								closed up 21:30	
								PH B & C loaded in 4 pics	

153

Date 13-14 Oct 1923 Wed-Thurs Observer Hd-Hz Julian Day 286-287 Hze-Mce

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28668	9 Peg	21 39.8	+16 53	G40	IIaOb	13	44°F	21 04	21 13	B
28669	"	"	"	"	"	"		21 14	21 18	C
28670	ε Peg	21 39.3	+09 25	"	"	"	43°F	21 21	21 26	A
28671	"	"	"	"	"	"		21 30	21 34	B
28672	HD 207673	21 45.6	+40 40	"	"	"		21 37	22 11	C
28673	"	"	"	"	"	"	42°F	22 12	22 38	A
28673F	focus test	in in / out out		"	"	"	"			B
28674	ζ Cep	23 35.2	+77 04	"	"	"		22 51	23 05	C
28675	HD 6739	01 21.4	-00 55	"	"	"	41°F	01 00	0239	A
28676	HD 36665	5 28.3	+27 59	"	"	13		02 57	04 05	B
28677	30 37° 1242	5 35.9	37 56	"	"	17	39°F	04 12	05 09	C
28677T	calibration step wedge				(28668-28677)					

Dome Temp.
Focus 61
Dome Temp.

Dome Temp. 45°F

Focus 61½ / 60½

Dome Temp.

Transparency Conditions cirrus at start
from 0100 thin cirrus and wet sky
" 0200 - excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 42m	17 12	1	5.54	G5 IIIb	15-15-15	MK Std. some clouds. focus 61½	100/16 fine
W 48m	"	1			15-30	same "	100/8 fine
W 0 54	+09 44	0	3.98	K2 IIIb	45	" [cirrus] "	40/10 fine
W 1 03	"	0	"	"	45	" "	40/5 fine
W 1 35	~~+0 59 44 01~~	1	6.5	A2 Ib	15-15-15	"	200/15 fine
W 1 01	"	1	"	"	15-15-15	" clouds focus 60½	200/8 fine
						more clouds coming; sky ¾ covered.	
					5/5 — on to fifty		OK
W 38m	77 27	1	4.25	K1 IV	15-30	MK Std. Thick	40/4 fine
0226W	-0 34	0-1	7.5	K0	15-15-15	Std. Jel.	200/50 fine
E 0 15	28 05	1	8.40	B1e III-V	15-15-15	Cu-Be (Hz) Field OK	800/60 fine
0041W	37 59	1-2	9.28	B3 Vpe	15-30	Cu-Be (mu) Field OK	800/25 only poor
						cirrus just after 2867 + bright	
						~~KRGFL~~ NEGATIVE ~~IX~~ BRIGHT	

155

Date 15 Oct 65 FRI - SAT Observer Md, Mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle East
286 77 S,	sky			G10	IIaDk	9	52°F	17:35	17:39	C	E 37
77 S_2	sky			G10	IIaDk	9	52°F	17:42	17:47	C	"
77 S_3	sky			G10	IIaDk	9	52°F	17:49	18:0°	C	"
-77 F	focus test in in/out out			G10	IIaDk	9	52°F			C	"
406-1	HR 7796	20 20.9	40 08	t = 20 sec					18 4[illegible]		E 16
-2	HR 80 85	21 04.9	38 31	"				TOO CLOSE (BRIGHT)			"
-2	HR 8115	21 11.5	30 0[illegible]	"					19 34		E 0 17
-3	HR 7457	22 59.3	29 58	t = 50 sec					20 45		E 3
-4	HR 8761	23 03	15 01	t = 70 sec					21 30		E 12 0 12
-5	HR 9088	0 00.3	26 53		"				21 44		E 5
-6	HR 27	0 08.5	45 53		"				22 02		E 4
-7	HR 63	00 15.3	38 30		"				22 17		E 3
-8	HR 8781								22 37		W 0 55
-9	HR 9086								23 06		W 1 26

Dome Temp. 58°F

Transparency Conditions very good

Focus

Dome Temp.

NOTE: TO FRANK: COULD THE BULBS FOR THE RECORDER BE EITHER BOTH RED OR BOTH CLEAR?

MIDDLE

Ending Time E.S.T.	P.H.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	C	E 0 37	40				45	immediately after sunset normal slit length 20/15	WK
	C	"	"				45	apparent sunset 17:33:30 20/7	
	C	"	"				45	20/2	
	C	"	"				5.5 + no filter	G10 light in prism	C to V.
								HBN HBW 45 42 41 38 35	
9 44		E 0 16			2.32	FP1b		B2 A3 A5 A6 A5 B1 B3 +	Sky
					5.77	K5 V			
1 34		E 0 17			3.4	G8 II		B4 A5 B2 B4 B4 B5 B6	
								interchanged tubes in both.	
41		E 0 31			12.6	G2		D6 D4 D6 D6 D6 D6 D6	
1 76		E 0 12			2.57	B9.5 II		B2 A3 A4 A4 A4 A5 A6	
1 44		E 0 56			5.85	G20 II		C4 B5 C2 C3 C3 C3 C4	
2 12		E 0 46			5.1	F2 II		C3 B4 B5 B6 B6 B6 C3	
2 7		E 0 38			4.44	A2 V		C2 B2 B4 B4 B4 B5 B6	
2 37		W 0 5'5			2.57	B9.5		B2 A3 A4 A4 A4 A5 A6	
3 11		W 0 26			5.85	G2 V		C4 B5 C2 C3 C3 C3 C4	

157

#10822

Date 15-16 Oct (Cont) Fri-Sat Observer Mch — Msa Sy ai Mel Hr Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
406-10	HR 269	0 54.8	38 18	t=	20 sec 700V				23 31		E 03
-11	HR 458	1 04.7	41 14		"				23 45		E 28
	"	"	"						00 13		E
406-12	HR 8781	2303.0	+15 01		20s				00 37		0250 W
" -13	HR 9088	0000.3	26 55		20s				00 56		
-14	HR 8781	2303.0	15 01		"				01 22		
406-15	"	"	"		"				01 40		0937 W
-16	"	"	"		"				01 54		0411 W
-17	HR 9088	0000.3	26 55		20s				02 15		0356 W
906-18	HR 1144	343.1	+24 45		20s				02 42		0049 W
-19	HR 9088	0000.3	26 55		20s				03 01		0421 W
-20	"	"	"		"				03 21		0541 W
-21	"	"	"		"				03 39		0459 W
-22	HR 1641	05040	41 12						04 22		0351 W
-23	HR 2047	05 52.4	+20 16						04 40		0 W
-24	2421	06 35.6	+16 26						04 58		0 15E

Dome Temp.
Focus
Dome Temp.

Dome Temp. 45° - 9:00 AM

Transparency Conditions Excellent

Focus

Dome Temp.

Cn, Rc, Mcc looked for comet after EST 05 30 Ikeya-Seki with no success

M 10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS 1/3 N	1/3 W	43	47	41	38	Quality 33
E 0 03			3.74	A1 V		B5	A6	B2	B3	B2	B3	B5
E 0 28			4.18	F8 V		B6	B2	B3	B4	B4	B5	B5
0001 E			"	"		"	"	"	"	"	"	"
0250 W			2.57	B9.5 III		B2	A3	A4	A4	A4	A5	A6
216 W			5.85	G2 V		C4	B5	C2	C3	C3	C3	C4
0339 W			2.57	B9.5 III		B2	A3	A4	A4	A4	A5	A6
0357 W			2.57	B9.5 III		B2	A3	A4	A4	A4	A5	A6
0411 W			"	"		B2	A3	A4	A4	A4	A5	A6
0354 W			5.85	G2 V		C4	B5	C2	C3	C3	C3	C4
0019 W			5.63	B8 V		C4	B4	B6	B6	B6	B6	B6
0421 W			5.85	G2 V		C4	B5	C2	C3	C3	C3	C4
0341 W			"	"		C4	B5	C2	C3	C3	C3	C4
0458 W			"	"		C4	B5	C2	C3	C3	C3	C4
0039 W			3.28	B3 V		B3	A4	A5	A6	A6	A5	A6
0009 W			4.62	G0 V		B6	B3	B4	B5	B5	B6	B6
0015 E			1.93	A0 IV		A6	A2	A3	A4	A3	A4	A6

150 Visitors showed Ring Nebula Cn, Rc, Ai, Co

159

D. Hube (HS) and Tom Rieck married on Thursday (Oct 16) (TOR)

Date 16-17 Oct 1st-Sun 1965 **Observer** Cn McC - Db **Julian Day**

Plate No.	Object	R.A. 1900 65	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
407 - 1	NGC 7332	22 35.7	+23 37	t =	60s	800V			22h 00m	
-2	"	"	"							
407-3	HR 63 θ And	00 15.3	+38 30						22h 46m	
407-4	M31	00 40.9	+41 05						23 15	
-5	HR 458	01 34.7	+41 14						23 40	
-6	HR 63	00 15.3	+38 30						23 57	
-7	HR 458	01 34.7	+41° 14						00 20	
-8	HR 27	00 08.5	+45 53						00 39	
9	HR 9088	00 00.3	+72 55						00 57	
10	HR 153	00 35.0	+53 43						01 21.2	
11	HR 63	00 15.3	+38 30						01 38	
12	HR 458	01 34.7	+41 14						02 01	
13	HR 63	00 15.3	+38 30						02 40	
14	HR 1412	04 26.7	+15 48						3 7 51	
15	HR 63	00 15.3	+38 30						3 34	
16	HR 458	01 34.7	+41° 14'						3 49	

Dome Temp.
Focus
Dome Temp.
Hour Angle Sid

Dome Temp. 46° F

Focus

Dome Temp.

Transparency Conditions Excellent!!

SAT. OCT 16 DOME PAINTED WHITE

Hour Angle (Mid / ~~End~~)	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS: HBN	HBW	45	42	41	38	35	Quality
00 47 W			11.8	G3		D6	D2	D4	D5	D5	D5	D5	
~~00 05 E~~			"	"		D5	D2	D4	D5	D5	D5	D5	
00 05 E			4.44	A2 V		B4	A5	A6	A6	A6	B2	B3	
00 00			4.33	G5		D3	C4	C6	D3	D3	D4	D4	
00 31 E			4.18	F8 V		B3	A4	A6	B2	B2	B2	B3	
01 05 W			4.44	A2 V	—	B4	A5	A6	A6	A6	B2	B3	
00 10 W		MV	4.18	F8 V		B3	A4	A6	B2	B2	B2	B3	
01 54 W			5.1	F2 II		B5	A6	B3	B4	B3	B4	B6	
02 21 W			5.85	G2 V		C2	B3	B5	B6	B6	C2	C2	
02 10.5 W			3.72	B2 V		B2	A3	A4	A4	A4	A4	A4	
02 47 W			4.44	A2 V		B4	A5	A6	A6	A6	B2	B3	
01 49 W			4.18	F8 V		B3	A4	A6	B2	B2	B2	B3	
03 48 W			4.44	A2 V		B4	A5	A6	A6	A6	B2	B3	
00 4.5 W			3.62	A7 III		B2	A3	A4	A5	A5	A6	A6	
04 43 W			4.44	A2 V		B4	A5	A6	A6	A6	B2	B3	
03 39 W			4.18	F8 V		B3	A4	A6	B2	B2	B2	B3	

161

Date 16/17 Oct - cont'd. Observer DL JAG LV Julian Day

Plate No.	Object	R.A. 1900/65	Declination 1900/65	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	M.L. Ending Time E.S.T.	P.H	Hour Angle East
407-17	HR63	00 15.3	+38 30						4h 04m		5 41W
-18	"	"	"						4 22		5 24W
19	"R1341	01 17.5	+21 42						4 45		5 53W
20	HR 458	01 34.7	+41° 14'						5 11		5 02W
21	"	"	"						5 27		5 16W
22	"	"	"						5 43		5 32W

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle ~~End~~ Mid	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						HB N NBW 45 42 41 38 35	
5 14 W			4.44	A2V		B4 A5 A6 A6 A6 B2 B3	
5 32 W			-"-	-"-		-"-	
1 53 W			5.32	Ap		B6 B2 B3 B3 B3 B3 B4	
5 02 W						B3 A4 A6 B2 B2 B2 B3	
5 16 W							
5 32 W							
						Located at Jupiter 06:15 & moon	

163

Date 17, 18 Oct /65 **Observer** Cam - Lick **Julian Day**

Cam-Lyon Mac Mac

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28678	HD 174237	18 44.5	52 53	G40	IIaD	17	44°F	18 42	18 48	A	01 30 W
28679	"	"	"	"	"	"	"	18 50	19 00	B	01 41 W
28680	HD 235668	21 53.1	51 06	G40	IIaD	"	"	19 07	20 27	C	03 01 E
28681	BD+47° 3656	21 57.1	47 42	G40	IIaO	17	43°F	20 30	22 39	A	W2 07 W
28682	HD 2789	0 26.3	66 36	G40	IIaO	17	42°F	22 46	00 11	B	W1 09 W
28683	HD 9812	01 30.8	58 08	G40	IIaO	13	42°F	00 14	00 54	C	00 40 W
28684	HD 14422	02 14.7	56 56	"	"	"	41°	01 12	02 36	A	01 41 W
28685	BD+57° 612	03 07.3	59 33	"	"	"	"	02 46	05 36	B	03 17 W
28685T	calibration	step	wedge		(28678-28685)						

Dome Temp.
Focus 61
Dome Temp.

Dome Temp. 48°F

Focus 61

Dome Temp.

Transparency Conditions cirrus

1930: fine

2300 thin clouds

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
11 49	01 30W	53 58		5.81	B3e	15-30	Cn · Be focus 61	200/10 fine
11 50	01 4W	"		"	"	15-15-15	" " 200/15 fine	
12 25	80 01 E	51 24	1	8.46	B2e III-V	15-15-15	" " 800/60 grinding	
12 32	N2 07	48 00	1	9.23	B3e III-V	15-15-15	" FIELD OK (Cn) 800/60 fine	
11	W1 09	66 59	0-1	8.61	B2e	15-15-15	" " 800/60 grinding	
11	0048 W	58 25	0	7.4	B5 V	15-15-15	B Std. Vel. (clouds) 800/60 poor, grinding	
12	01 45 W	57 12	0-1	9.58	B1 IV pe	15-15-15	CN - Be MAY BE WEAK STAR 800/60 poor grinding	
11	03 E W	59 47	"	9.33	B1 V pwn e	15-15-15	" " 200/60 weak	

note sup. trio + slit setting

probably OK Cn

He says field OK

165 PH B&C Loaded in magics

Date 18-19 Oct Hour - Twin

Observer Db Mcl Cm - Mse Sy Mcl Mse

Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Dome Temp. Focus Dome Temp. Hour Angle
2 [illegible]	HD 170335	18 23.2 1965	-25 19 1965	C40	Tri-X	.017	54°F	18 24	19 06		W2 10
408-1	HR [illegible]	21 04.9	+38 31	t=20 s.		800V			19 42		00 09W
-2	NGC 7332	22 35.7	+23 32	" t=60 s					20 24		00 45E
-3	HR 8781	23 03.0	+15 01	" t=20 s					21 31		00 [illegible] W
-4	NGC 7742	23 42.6	+10 34	" t=60 s					22 16		W2 06
-5	NGC 7619	23 18.6	+08 00	"					23 30		W1 40
-6	NGC 7626	23 19.0	+08 01	"					00 25		W2 08
408-7	HR 8085	21 04.9 1965	+38 31 1965	t=20 s					01 01		W5 08
" -8	"	"	"	"					01 09		W5 [illegible]
-9	"	"	"	"					01 18		W5 46
-10	HR 8781	23 03.0	+15 01	t=20 s					01 41		W4 10
-11	"	"	"	"					01 51		W4 21
-12	"	"	"	"					02 02		W4 31
908-13	HR 493	01 40.6	+20 07	t=60 s					02 33		W2 25

Dome Temp. 60 °F

Focus .....

Dome Temp. .....

Transparency Conditions ... Excellent but considerable haze around horizon (166)

Hour Angle E.S.T.	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HB N	HB W	45	REMARKS 42	41	38	35	Quality
W2 10	-25 17	0-1	6.71	B15e[III]		for [illegible] focus 65			Telescope reversed				weak
00 09W			5.77	K5 V		C2	B3	B5	C3	C2	C4	C5	
00 40E			11-8	G3		D5	D2	D4	D5	D5	D5	D5	
00 00 E W			2.57	B95 II		A6	A2	A3	A3	A3	A4	A5	
W0 06			12.2	G0		D6	D3	D5	D5	D5	D6	D6	+ sky
W1 44			12.4	G5		D6	D3	D5	D6	D6	D6	D6	+ sky
W2 38			12.7	G3		D6	D3	D5	D6	D6	D6	D6	
W5 28			5.77	K5 V		C2	B3	B5	C3	C2	C4	C5	
W5 37			"	"		C2	B3	B5	C3	C2	C4	C5	
W5 46			"	"		C2	B3	B5	C3	C2	C4	C5	
W4 10			2.57	B95 II		A6	A2	A3	A3	A3	A4	A5	
W4 21			"	"		A6	A2	A3	A3	A3	A4	A5	
W4 31			"	"		A6	A2	A3	A3	A3	A4	A5	
W2 25			5.32	K1 V		C2	B3	B5	C2	C2	C3	C4	

Date Mon/Tues con't Observer M el, Sy, Mac Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	~~Starting Time~~ E.S.T.	~~Ending Time~~ E.S.T. (M1-B)	P.I.	Hour Angle (M1-B)
408-13	HR 617	02 05.1	+23 18	t= 20s					0305		W 2 32
-14	HR 1017	03 21.8	+49 44	t= 20s					0330		W 1 55
-15	HR 1327	04 17.4	+65 04	t 20s					0340		W 0 55
-16	HR 1030	03 22.9	+8 53	"					0357		W 2 17
-17	HR 1346	04 17.8	15 33	"					0416		W 1 37
-18	HR 1373	04 20.9	17 27	"					x 5 41		W 1 53
-19	HR 1409	04 26.6	+19 07	"					4.59		W 2 06
-20	HR 1411	04 26.6	+15 53	"					5.28		W 2 14

Dome Temp. 56°

Focus

Dome Temp.

Transparency Conditions Very Good

0400: fog.

Index Time E.S.T.	P.M.	Hour Angle End M.D	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS HBN	HBW	45	42	41	38	39	Quality
03.05		W2 32			2.23	K2III		A6	A2	A4	A6	A6	B3	B4	
1.30		W1 35			1.90	FS1b		A4	A1	A2	A3	A3	A4	A5	
03.03		W0 55			5.40	GSIII		G2	B3	B5	B6	B6	c2	c3	
03.57		W2 07				GSIII		B4	A5	B2	B3	B4	B5	B6	
04.15		W1 31				KOIII		B4	A5	B2	B	B	B5		
4.41		W1 53				KOIII		B4	A5	B2	B4	B4	B6	B6	
4.59		W2 06				KOIII		B3	A4	B2	B3	B4	B5	B6	
5.28		W2 30				KOIII		B3	A4	A5	A6	A6	B2	B3	

169

Date 19-20 Oct 1965 Tues-Wed. **Observer** L - H's **Julian Day** Mse Mse

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28687	HD 8779	01 21.4	-00 55	G40	IIaOb	13	52°F	22 55	0 02	B	W0 14
28688	HD 7019	01 05.5	37 12	G40	IIaOb	13	50°F	0 07	0 18	C	W0 45
28689	HD 14422	02 24.7	56 56	G40	IIaOb	17	11	0 30	3 07	A	W2 20
28690	BD 37° 1292	5 35.9	37 56	G40	IIaOb	17	48°F	3 16	4 22	C	W0 25
28691	HD 36589	05 27.7	+20 24	G40	IIaOb	13	47°F	4 28	4 58	A	W1 03
28692	HD 36881	05 29.7	+10 10	G40	IIaOb	13	11	05 00	5 14	B	W1 17
28693	HD 37752	05 35.8	+23 16	G40	IIaOb	13	11	05 17	5 37	C	W1 33
28693T	calibration step wedge			(28686 - 28693)							

Dome Temp.
Focus 64½
Dome Temp.

Dome Temp. 54°F

Focus 64½ / 63

Dome Temp. .....

Transparency Conditions POOR

0h0m: good (some thin cirr.)

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 02	P	W 0 14	- 0 34	0	7.5	K0	15-15-15	Std. Vel. focus 64½ 800/125	fine
0 16	C	W 0 45	37 34	0	5.70	B8	15-15-15	B8-B9 200/15	grainy
3 17	A	W 2 20	57 15	0	9.58	B10 pe	15-15-15	Cu-Be FIELD DRAWN focus 63 800/50	fine
4 22	C	W 0 20	3.7 57	0 ~~0+~~	9.28	B3 pe	15-30	Cu-Be build checks OK " 400/~~20~~ 18 only	dweeb
								4:15 – thick cirr. over all	
								entire sky / exp. mtrs. stopped	
5 58		W 1 03	20 28	0	6.04	B8	15-15-15	B8-B9 cirr. 400/30	fine
5 14		W 1 17	10 13	00	5.54	B8	15-15-15	B8-B9 cirr. 400/30	fine
5 39		W 1 33	23 20	00	6.47	B9	15-15-15	B8-B9 cirr. 400/30	fine
								DAWN	

170 Visitors showed Ring Nebula, Saturn Cn, Ck, Dm.

171

Date Sat-Sun Oct 23-24 1965 Observer MCl - Cn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
~~409-1~~		1965 ~~0 44~~	~~+15 00~~							
	Mon. Tues 25-26 Oct 1965			Cn Mse	- Sky Mse					
28694	HD 219749	23 13.2	44 57	G40	Ea Db	13	43°F	20 28	20 44	A
28695	HD 216624	22 49.4	61 36	G40	Ea Db	17	43	20 50	23 00	B
28696	BD 63° 48	0 21.0	63 52	G40	Ea Db	17	42°	23 05	01 16	C
28696 F,	focus test in in/out and			G40	"	17	40°F			A
28697	HD 26162	04 03.3	+19 21	G40	"	13	"	01 29	1 43	B
28698	HD 7019	1 5.5	37 12	G40	"	13	"	1 48	1 53	C
28700	HD 23258	3 38.6	+20 37	"	"	"	"	2 04	2 15	B
28699	HD 23383	3 39.7	55 37	"	"	"	"	1 57	2 04	A
28701	BD 25° 970	5 40.2	+25 30	"	"	17	40°F	2 21	3 19	C
28702	HD 38708	5 42.4	29 06	"	"	"	40°F	3 21	3 47	A
28703	BD 23° 1148	5 55.0	+23 20	"	"	"	"	3 50	4 29	B
28704 28704T	HD 42259	6 04.6	-05 03	"	"	"	40°F	4 33	5 43	C

Dome Temp. 41°F
Focus 61½/60½
Dome Temp. .....

Transparency Conditions ... occasional light cloud; raining by ~~11~~ 12

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
~~2.67 02W~~							
dome 50°F						Cloud then clearing after 0700; Excellent / EXTREMELY clear	
?							
	45 14	1-2	6.30	B9p	15-20	38-39 focus 61½	400/30 guiding
02 06W	61 58	2	~~9.5~~ ~~9.07~~	~~BOV B2pe~~	15-15-15	Cu-Be field drum	800/60
W2 50	+64 16	2→1	10	B1nn	5-15-15	Cu-Be " "	800/5-1 very poor guiding at times
					5/5 — G10 filter		
?		1	6.4	K1	5	Std. Del. drum 60 G10 filter 01:30 - thin cirrus	400/45
W 2 34	37 34	0	5.7	B8	15-30	B8-B9	200/15
W0 33	20 49	~~1~~ 2	6.01	B9	45	B8-B9	200/15
W0 18	55 49	1	6.02	B9	45	B8-B9	200/15
E0 26	25 33	0-1	8.63	B3ne	15-15-15	Cu-Be field OK (M 22)	800/50
0 0	29 08	1-2	8.25	B3pe	15-15-15	Cu-Be field OK	800/50
W0 30	23 22	2	8.93	B2ne	15-15-15	Cu-Be field OK	800/50
W1 36	-5 02	1→0	8.87	B0e II-V	25-15-15	Cu-Be " DAWN	800/50

1"H A & B loaded in N pier ai Mol showed ~ 30 viscous, aliases (mis read clamp)

173

Date 28-29 Oct/65 Observer Bc — Sy Julian Day
MSE MSE MID

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending Time~~ E.S.T.	P.H
~~2705~~ E	focus test in in/out out			G40	IaDb	13	30°F			A
~~2706~~	BD+10°3774	18 5'9x	+10 35	G40	IIaDb	17	11	18 15 49	19 53	B
									3 hr 21'	
409-1	HR 8976	23 35.7	44 09		t=20 sec					
409-2	NGC 7332	22 hr 35.7 m	+23° 37'		t 60 sec.		Diaphragm 38" arc		21 h 53 m	
-3	NGC 7457	22 59.3	29 58		"			"		
~~-4~~	~~NGC 7619 23 18.6 +08 00~~							"	22 52	
-4	NGC 7619	23 18.6	+08 00		"		26°F	"	~~0 33~~	
-5	HR 617	02 05.1	23 18		t=20 sec				0 33	
-6	NGC 278	0 50.1	47° 23'		t=60 sec				1 02	
-7	HR 617	02 05.1	23.18		t=20 sec				2 04	
-8	NGC 621	02 06.4	10 51		t=60 sec				2 43	
-9	NGC 1270	3 16.6	41 21		"		22°F		3 59	
10	HR 617	02 05.1	23 18		t=20			"		

Dome Temp. Focus Dome Temp. Hour Angle East

Dome Temp. 24°F

Focus ... − 30 EST

Dome Temp. ...

Transparency Conditions ... clouds around horizon 2100: very good

Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	H/3 N	H/3 W	45	REMARKS 42	41	38	35	Quality
					5/5 — one faint								O, K.
W 3.04	11 05	②	9.66	B1.5 IV n e	15-15-15	Ca Ba		Binary ~ 5"		Sep 1/24			Lunch
0hr 6' east			4.33	B8 V		B3	A4	A5	A5	A5	A6	A6	
						B3	A4	A5	A5	A5	A6	A6	
1hr 28' W			11.8	a3		D6	D2	D4	D5	D5	D5	D5	
1hr 58 W						D6							
W2 05			12.6	G2		D6	D3	D5	D6	D6	D6	D5	
~~W0 39~~			12.4	G5		D6	D3	D4	D6	D5	D5	D5	
W0 39			~2	K2 III		A5	A1	A3	A5	A5	B2	B2	
W2 24			11.5	F0		D5	D2	D4	D5	D4	D4	D4	
W2 11			2.2	K2 III		A5	A1	A3	A5	A5	B2	B2	
W3 38			12	E2		D6	D3	D5	D6	D6	D6	D5	
W2 48			12.7	G9		D6	D3	D5	D6	D6	D5	D5	
			2.2	K2 III		A5	A1	A3	A5	A5	B2	B2	

PH 1 loaded in n. pier

175

Date 28/29 Oct/con't Observer mcl sge Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	~~Ending Time~~ E.S.T.	P.H	Hour Angle Mid
409 - 11	HR617	02 03.4	23 18		t = 20 sec				4 50		4 58 W
-12	HR 2047	05 52.4	20 16		t = 20 sec				5 10		1 30 W
-13	HR 2473	06 41.4	25.10		t = 20 sec				5 30		1 01 W
~~-14~~	~~HR 2990~~	~~07 03.2~~	~~28 07~~		"						
-14	HR 3249	8 14.6	+9 18		"				5 - 49		50 12

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... Excellent

Hour Angle End M:S	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS Hβ N Hβ W 45 42 41 36 35	Quality
4 58 W			2.2	K2III		A5 A1 A3 A5 A5 B2 B2	
1 30 W				GV		B4 A5 B2 B3 B3 B4 B4	
1 01 W				G8Ib		B2 A3 A5 B3 B3 B5 B6	
				~~K0III~~		too bright for ~~20~~ t = 20 sec	
E 0 12				K4III		B3 A4 B2 B4 B4 C2 C3	

It is interesting to note that the temp rose slightly when the dome was opened & remained constant.

177 Date 29/30 Oct 1965 Observer Ca – Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28706	HD 172694	18 36.5	−15 57	C40	IIaO B	17	31°F	18 01 30	19 01	A	02 35 W
28707	BD+23° 3761	19 41.2	+24 04	C40	IIaO B	17		19 05 44	20 35	B	03 04 W
28708	BD+47° 3487	21 32.1	+47 28	C40	IIaO B	17	32°F	20 39	22 20	C	04 02 W
28709	BD+50° 360	01 42.2	+50 37	C40	IIaO B	17	32°F	23 18	23 28	A	

Dome Temp.
Focus
Dome Temp.

178

Dome Temp. 41° F

Transparency Conditions Good - some cloud in N 18h

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 35W	−15 54	1-0	8.31	B0e [illegible]	15-15-15	Cn Be Focus 56.5 800/510	fine
03 04W	+24 16	2	9.49	B0II:	15-15-15	Cn Be Windy; Image unsteady Field clear 300/60	guiding
03 02W	+47 44	2	9.80	Bpe	15-15-15	Cn Be 22h - some thin cloud. Field clear 300/[illegible] 2220 clouds.	good
00 00		1	9.52	B3ne	4/5	Cn Be 2328 clouds again	weak.
						Cloud up 0h	

179

Date 31 Oct - 1 Nov Observer H.D., Mrs. Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle East
28709 F	focus test	in in / out out		G40	IIa Ob	13	38°F			A	
28710	B Cass	0 03.8	58 36	G40	IIa Ob	13	38°F	22 59	23 02	B	W 1 14
28711	"	"	"	"	"	"	"	23 04	23 06	C	W 1 22
28712	"	"	"	"	"	"	"	23 09		A	W 1 45
28712 T1	Calibration Step Wedge		for plates	28706-12						E	
	Now 1 Cm		Focus found at 54.5					? ⇒ 59.5 intended			
T2	Normal Iron	Arc		G40	IIa Ob	13	35°			A	
T3	"	"	"	"	"	"	"			B	
T4	"	"	"	"	"	"	"			C	
F1	Focus Test			"	"	"	"			A	

Dome Temp. 41°F

Transparency Conditions fair

Focus .....

Dome Temp. .....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						5-5	G10 filter	
	W 1 18	58 57		2.25	F2.0	45	Mt. Std. (normal) 100/12	centre to red, poor focus, strong
	W 1 22	"		2.25	F2.0	45	Mt. Std. (1/2 normal) 100/6	fine
	W 1 25	"		"	"	45	" " 1/4 100/3	fine
							Rain threatening - cloud 500/	
							closing up 01 00	
		Normal				15	G10 filter	
		Lower eye slit assembly				15	"	
		Without GG-5 filter				15	"	
		In-In / Out filter				5-5	"	centre to red and,

3 ~~124 loaded~~ ~~on 11 plates~~

The telescope was found up and the aperture half-closed! → consequently the exposure will be weak — 4 to 6 hours VERY ANNOYING

191 **Date** Nov 1/2 May/Tues '65 **Observer** ~~HS~~ Mse / ~~S~~ Db / mel-Sy **Julian Day**

Dome Temp. 3
Focus 57
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28713	HD 212943	22h 22.8	+04 12	G40	IIa Ob	13	32°F	19h 45m 10s	20 05	A	00 06 W
	~30 Visitors (Dr. Deviaugue)										
28714	BD +63°48	00 21.9	+63 52	G40	IIaOb	17	31	21 12 90	0 12	B	W2 15
28715	BD+49°967	3 26.5	+49 59	G40	IIaOb	17	26°F	0 21 30	1 21	C	W0 17
28716	HD23552	3 41.0	50 26	G40	IIaOb	13	25°F	1 25 11	1 47	A	W0 47
~~28717~~	~~HD23567~~	~~3 41.3~~	~~56 49~~	~~G40~~	~~IIaOb~~	~~13~~					
28717	HD 23662	3 41.8	68 12	G40	IIaOb	13	25°	1 54 15	2 24 20	B	W1 03
28718	HD25670	4 08.1	61 36	G40	IIaOb	13	24°F	2 30	3 09	C	W1 73
28715F	focus test in in/out out			G40	IIaOb	13				B-27	

after #100: thin cirrus may also occur 5:0.

Dome Temp. 33°F

Focus 57/55/54

Dome Temp.

Transparency Conditions Overcast early in evening and clearing.

LEVEL MTR. UNUSUALLY UNSTEADY DUE TO HIGH HUMIDITY?

AT #800 – 20 53 MT

0100 cirrus over ½ sky
0300 cirrus over all sky
≥ 1-2 mag abs[illegible]

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.		REMARKS		Quality
00 06 W	+04° 32′	0	5.9	K0	15-15-15	Std. Jel.			fine
W2 15	+64° 15′	0	10	B1nne	15-15-15	Cr Be	FIELD CHECKS OK	800 balance unsteady	fine
W 0 17	50° 10′	0	9.2	A2	15-30	Hd - al Pero	FIELD DRAWN focus 55	~~800~~ 0	fine
						sky deteriorating & very poor seeing - unable to finish exp.			
W0 47	50 37	00	5.87	B8	15-15	B8-B9	CIRRUS	400/30	fine
~~W0 47~~	~~46 39~~					~~B8-B9~~		40/30	
W1 03	63 23	00	6.28	B8	15-15-15	B8-B9		400/30	good, some fog[illegible]
W1 23	61 45	1	5.59	B8	15-15-15	B8-B9	focus 54	400/30	fine
					5/5 ← G15	fillter			O.K.

#117B loaded in K jeff

193 Date Nov 2/3, Tues/Wed 1965 Observer Cw – Miss H A Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28719	BD +23° 3761	19 41.2	+24 04	C40	IIaoB	017	27°	17 58 78	20 34	A
28720	HD 560	00 04.9	+10 36	C40	IIaoB	013	25°	20 43 8	20 59	B
28721	"	"	"	"	"	"	"	21 01 1	21 15	C
28722	HD 3772	00 26.2	+53 59					21 22 2	21 26	A
28723	"	"	"	"	"	"	"	21 28 3	21 33	B
28724	BD +50° 360	01 42.2	+50 37	"	"	017	"	21 40 106	01 12	C
28725	HD 27587	04 34.5	+41 57	"	"	013		01 27 53	3 13	A
28725F	focussed in middle of field				IIaoOb	13	31°F			F
28725T	Check on sky Wedge for plates 28719–25									

Dome Temp. 3
Focus 5
Dome Temp.

Hour Angle End

Dome Temp. 34°

Focus 55/

Dome Temp. .....

Transparency Conditions Cloud until 17h - clearing at west
- some cloud around horizon
from 1900 - thickening increasing
1930 - 10% air again

184

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
03 20 W	+24 16	0	9.49	B0 Tie	15-15-15	Cn Be Focus 55. Field checks l. cloud 19h 800/47	1 weak.
00 40 E	+10 56	0	5.5	B8	15-15-15	B8-B9 EXT 300/15	fine
00 24 E	"	"	"	"	15-15-15	" " " "	fine.
00 32 E	+54 20	1	4.9	B8	50	" " " "	fine.
00 25 E	+50	1	"	"	50	" " " "	fine
01 57 W	+50 56	1	9.52	B3 ne	15-15-15	Cn Be Field check 800/60	fine.
W 1 05	42 0	0-1	7.7	G2	15-20	STD. VEL. EVERYTHING 400/60	3 6 fine

WET & WATER DRIPPING

5/5 ← 90% IN THRU SHUTTER with 3/4 OPENING

- cam. secondary covered in moisture; 7.5 oz.

Jam: - the plate at the right hand side in unexposed box is too short for the plateholder.

185

Date Nov. 4 1965 Observer SK-RC Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
410-3307	α Lyr	18h 35.7	+38° 45	4-4-2		28		18 25			
								19 20	try again		
3308	α Lyr	18 35.2	+38 4	6-5-2		28		19 58			
Visitors from 20 15 — 21 10											
Show: Moon											

Dome Temp. 40°F

Transparency Conditions good

Focus

Dome Temp.

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				poor	0.03	A0V		Standard Zero unstable, power was off!	
		yet somewhat unstable!		-"-				Cloud layer drops [illegible] S', Moon	
								Clouds come up [feel back home]	
								Solid cloud cover	

Frank: Illumination of diaphragm at spec. [illegible] sometimes comes, ~~sometimes~~ [illegible] not

1909

Date 5 Nov (Feb 1910) Observer Mse, HL Julian Day

Dome Temp.
Focus 5
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28726	BD+40° 961	23 26	41 59	6	30	.1	33	01 31 85	04 21	9	
28727	AD 23 2	7 54.3	+29	6	30	.3	29	4 37 48	6 12		

Dome Temp. 3 - 0 =

Focus 57/56

Dome Temp. .....

Transparency Conditions ..... Good .....

0600 See - Very poor!

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		3 30 .1	5 0 11	0-1	4.2	A2	15-5-15	x pers [illegible] 4200, 2m	plate fogg[illegible]
		W 0 54	2 9 8	0	7.0	57	15-15½	5 std V's 4200 60	fine.
								NO E. AT 0.5 TIME KEY	
								IS INCREASED.	

189

Date 5-6 Nov. Fri-Sat, 1965 Observer HB/AL — Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28728	α Cyg	20 38.0	+44 55'	G40	IIa-D	13	32°F	1826:30	1826:35	A	0h32m W
28729	"	"	"	"	"	"	"	1830	1830	B	0h33m W
28730	HD 203638 HR8418	21 18.4	-21 16	"	"	"		1842 39	1959	C	1h20m W
28731	HD 209819	22 01.0	-14 21	"	"	"	32°F	20 10	20 23	A	0h [illegible] W
28732	HD 223311	23 43.4	-06 56	"	"	"	32°F	20 51	21 22	B	0h 40m W
										C	
										A	

#28732 — interruption: coding device was not connected as listed

Dome Temp.
Finish
Dome Temp.

190

Dome Temp. 36°F

Transparency Conditions Poor. Thick overcast fairly

Focus .....

Dome Temp. .....

1830. 1-2 mag showing but not steady. Seeing not very good.

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
35	A	0h39mW	+45° 10'	~0	1.33	A2I	45	MK Std.	NORMAL	200/ ~~15~~	Luke.
1830	B	00h33mW	"	"	"	"	45	"	½ NORMAL		Luke.
59	C	01 20W	-21° 02'	0=	5.5	gK2	15-15-15	Std. Vel.	counting slowly	400/ ~~50~~ 60	fine.
20 23		01 01W	-14 02	0	4.3	B8	15-15-15	B8-B9 (not d+e)		200/15	fine plate marked
2 12		00 19W	-06° 35'	0+	6.3	gK4	15-30	Std. Vel.	during twilight very thick.	400/ ~~6~~ 13	weak.

Clouds

191

Date Tues-Wed Nov 9/10 1965 Observer Cr- Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
Standard			Power blocked out entire Exposure							
28753	BD +47° [illegible]	0 21.0	+63 52	C-M	Tri-X	17	25°	21 30 53	23 1½	F

Done Temp.
Focus
Done Temp.

Hour Angle End

Dome Temp. .....

Focus 5.4

Dome Temp. .....

Transparency Conditions Clear & Sun. T

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		- 17h 15m		Fair		2½ hr Exp.		- Sodakatchie Band.	
		0 1 [illegible]	[illegible]	0-1	10	[illegible]	15	[illegible]	fine.
			Good		2	3	30		

193

Date 14-15 Nov 65 Observer Hd - Hk Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28734	HD 204732	21 15	+43 54	G40	Tech	13	30°F	20 22 34	21 30	
28735	HD 4439	01 24.9	+5 38	"	"	13		21 45 13	22 16	
~~28736~~	~~HD 4331~~	~~03 22.6~~	~~+8 41~~	~~G40~~	~~Tech~~	~~17~~		~~22~~ 23 25 18	23 00	
28735T	Calibration Step Wedge for plate 28734-35									

Dome Temp.
Focus 16
Dome Temp.
Hour Angle End

Dome Temp. 33°F

Focus 56½

Dome Temp. .....

Transparency Conditions .....

1941

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3 19 W	44 14	1	7.5	B2 m2e	14,15,15	Cu-Be Somewhat [illegible] ±2m/54	fine
0 00	+6 01	2	6.2	K4	22-22	Str wk. ±2m/50	fine
Exp 0			7.7	F7	7	Per. on [illegible] 5	too weak
						Short plates	

195

3 m E tracking

Date 18 Nov 65 Thurs **Observer** Wise, Ai **Julian Day**

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28135 F1	focus test in in/out out			6x10	IIaD	13	30°			B	
28736	HD 203638	21	18.4	6x10	IIaD	13	11	17 30	17 44	A	
28736T	Calibration step wedge for plate 28736.										
28136 F	focus test in in/out out			6x10	IIaD	9	11			C	
F2										C	
F3										C	
F4										C	
F5							30			C	
	21 Nov 65 Sun										
28136 F6	focus test in in/out out			6x10	~~IaD~~ IIaD	9				C	

Dome Temp. 34°F

Focus 56/2

Dome Temp. 38°F

Transparency Conditions ....

~~SHORT TIME [illegible]~~ (PLEASE WAIT TO WIPE) TO BE [illegible]

→ PWR ⇒ FA SETTING WATER HAS DRIVEN 4 P.M. IN (WEST SIDE) CLOCK

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3						5/5	(G10 filter) set focus 56/2	OK,
[illegible]	E0 05			5.5	g5 2	15-30	Stud. Jet	l weak
							Clouds	
						5/5	(no filter)	E-W VI POOR
						11		
						11		
						11		
						11		St. c to vi.

G10 Y

By measure: focus should be 1.5

Note that the setting should be increased (i.e. turned clockwise) and then set at 1.5 as you turn counter-clockwise, i.e towards smaller nos. → THIS WAS THE CONVENTION FOLLOWED FOR ALL THE TESTS AS PER INSTRUCTIONS INSIDE FRONT COVER (Mc)

5/5 focus set 1.5 (3 mins - D-19) OK

197

Date..... Observer..... Julian Day.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F.
Nov 22	Cyg Rc		Test for flexure				in	δ		
28736 T	Focus Test	2 - 2 / Out Int		C40	Tech B	13	34°F	δ = +18°		
T	Full Aperture:		Outside at	δ = +18°				Inside at	δ = +70°	
T	Focus Test	2 - 2 / Out. Int						δ = +70°		
T	Full Aperture	Centre = 2h west Outside = Meridian		C40	Tech B	13	34°F	δ = +10		
T	"	Centre = 2h west Outside = Meridian		"	"	"	"	δ = +60°		

Dome Temp. ....

Focus ....

Dome Temp. ....

Transparency Conditions .. . .

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	FOCUS 58				5/5	C10 filter	slant. b.v
	11				4/4	" "	cl. bad.
	11				5/5	" "	O.K
					5/5	" "	O.K
					5/5	" "	cl. bad
							E.K
							P.F
							O.K.

199

Date ..... Observer ..... Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28737	NGC 3 [illegible]	00 3[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]°F	22 [illegible]	23-09	A	[illegible]
28738	NGC 2[illegible]	00 34[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	23 [illegible]	23-43	B	[illegible]
28737 T	Spectra of Stars in the [illegible]			[illegible]	[illegible]	13	"			C	[illegible]
28738 T	Calibration Step Wedge for plates 28737-38										

Done Temp.
Focus
Done Temp.

Dome Temp. 42° F

Focus 58 1/2

Dome Temp. 38° F

Transparency Conditions 22:45 clearing 200

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 2h 32m	41 00	0→1	8.2	15	15-15+	Std. Vel. & Eccentricity [illegible]	fine work
E 0h 54m	42 03	0	7.7	6.2	15-30	Std. Vel. CLOUDS [illegible]	
0h	11				5/5	one field	
						short set completed - 8 fields	

201:

Date ..... Observer ..... Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28742 T 1	Calibration Step Wedge for plates 28739–42										
	"	"	"								

Done Temp.
Focus
Done Temp.

Dome Temp. 28° F (-2.2° C)

Focus .....

Dome Temp. 24° = (-4.4° C)

Transparency Conditions ..... 0 - 9 - cloudy

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		1 20 W	43°	0		IIIa-J [III-V]		Bright [illegible]	Frame too strong - wrong filter? weak
		01 01 W	+28° 26'	0→1	9.0	B0, Se [III-V]	15-15-	Cn Re	60/60 guiding
		0 10 W	-19° 44'	0-1	6.2	F2	15-15-15	B8-B9	300/60 guiding
		1 23	-22° 24'	1	6.4	B2	15-15-15	B8-B5	300 guiding fuzzy
					6.2	F2		B8 B5	
					6.2	F7		B8-B7	
		2 30	+4°				5/5	Cn [illegible]	O.K.
								= 20 1/2 - [illegible]	

203

Date [illegible] Observer [illegible] Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
	[illegible]						[illegible]				
28742 T2 F3	[illegible]	(point without field plate)									
	Dec 1	1965	Cu								
28742 T2	Sky			G40	Landers	7	28°C	1 min ~ 3pm		A	
T3				G40	Landers	13	28°C	4	4	B	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							OK, OK.
					1 min	0.10 filter	
					1 min	"	

205

Wed Dec 1-2/65

Date [illegible] Observer [illegible] (Yp) 1st mse mf – H 2nd mse Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle End
28743	15 Ori	19 51.0	+27 29	Gro	IIaD	9		17 46 27	18 39	C	W 3m 03
28743T	Calibration	Step Wedge	for plate	28743							
28744	15 Lac	22 34.8	38 32	G40	IIaDb	13	30°F	19 04 3	19 10	C-	00 55 E
28745	"	"	"	"	IIaDb	"	"			A	"
28746	HD 3765	0 35.3	39 40	G40	IIaDb	13	11	19 28 24	20 16		W 1m 03
28746T	Calibration	Step Wedge	for plates	28744-46							
	Nov Dec	1950	Ep								
28746T2	Dark Spectrum	Centre 2° W	Ecliptic, Meridian	G40	IIaD B	13	29°	δ +60°		D	
T3	"	Dark 21°	Cal Spectra	G40	"	13	"	"		C	
4	"	"	"	G40		9	"	"		A+	
5	"	"	"	G40		9	"	"		C	

Dome Temp. 38°F

Transparency Conditions poor & windy (~5 w)

Focus .....

Dome Temp. .....

~20

206

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8 39	C	W. 3H	03 27 42	1→0	4.74	A5m	12-24	Eq. Width. airmass ~1.00 200/~~300~~ 66	weak
								EXP - MTR STOPPED	
9 10	C.	00 55 W			4.88	09V	1' ← 6-10 feet	MT Std. (1/2 norm) 400/15	fine
							5 (6-10 feet)	(1/4 norm) 4m/7	fine
11 16		W1H	03 40	∞	8.2	K5-	15-30	Std Vel. (7½ mag absorption) ~~800~~/~~300~~ 80	fine
								↳ SHORT PLATE - HAD TO REMOVE FROM SPECT. WITHOUT DARK SLIDE	
								RH. BOC localized: ...	

207

Date Nov / Dec 67 Observer [illegible] Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28747	α Leo	10 8 48	11° 37'	C40	London 2415	7	2°	18 [illegible]	19 [illegible]	
[illegible]	— " —	— " —	— " —	— " —	— " —	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	4	Ila O5	13	10° F	21 05	22 55	
28750	δ Uri A	5h 26.9	−0° 52'	G10	IIa O	7	20°	23 [illegible]	00 10	C
28751	ε Ori	05 31.1	−01 16	G10	IIIa O	9 (L)		0 20	0 32	A
28752	ζ Ori A	5 35.7	−2 00	G 10	IIIa O	9 L		0 44	00 55	C
4 11 −1	HR 2047	5 52.4	20 16		t= 20			1 41		
−2	HR 1346	4 17.9	15 [illegible]					02 00		
−3	HR 1373	4 20.9	17 27					02 16		
−4	HR 1577	4 54.7	33 06					02 365	after clouds 02 50	
−5	HR 2047	5 32.9	20 16					3 11		

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ... good

8 SETTING MOTION FROZEN (OR BUTTON ON HAND BOX BROKEN)

Hour Angle (Local MIDDLE)	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS (Local Mid. Exposure)	Quality
00 35E	-0° 20′	0	2.0	09.5 V	12-12-12	Bright stars in Orion 80/140	fine
0 12 E	-1 12	0	1.5	B0 I	12-12-12	80/140	fine
00 01W	-1 52	0	1.6	09.5 I	12-12-12	80/140	fine
						H3N H3W 45′ 42 41 38	B5
00 35			4.62	G0 V		B4 A5 B2 B3 B3 B4	B4
02 34W			3.86	K0 III		B3 A4 A6 B3 B3 B4	B5
02 41W			3.82	K0 III		B3 A4 B2 B3 B3 B4	B5
02 28			2.9	K3 II		B2 A3 A5 B3 B3 B5	B6
02 06			4.62	G0 V		B4 A5 B2 B3 B3 B4	B4
						Clouds	

209

Date Fri/Sat Dec 10/11 Observer DB Rc Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28753	α Cas	0h 34.8	55° 59	640	Lantern Slides	7	32°F	18h 24'	18h 4[illegible]	C	[illegible]
28754	α Cas	0h 34.8	55°59	640	"	7	32°F	18h 52'	19h 28	A	[illegible]
28754F	focus test			640	Halls		32°F			A	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 35°

Focus .....

Dome Temp. .....

Transparency Conditions ..... Cloudy but good seeing 2.10

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
8h52E	+56°22'	1	3.34	K5-M2	20-20-20	300/180	fine
0h11 W	"	1	—	—	20-	Mucl cloud 200/150	fine
			stopped			by cloud.	
	+45°					focus 57	
				—			
						first star motion tube / 20	
						doesn't work.	

211

Date Saturday/Sunday Dec 18/19 Observer Ai Cn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P	Hour Angle End
28755	HD 2789	00h 26m 3	+66° 36′	G40	IIaO-hyp	17	27°	18:06	22	A	C35 E4
28755 H	√Bond			G45		13	"			B	

Dome Temp.
Focus
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
22	0°35ᵐ E	46 00	1	8.6	B2	45	Cn Be 5/60	weak
		~45°					focus 55	slctr.

213

Date 19-20 Dec Observer Hm - Hz Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28756	BD+63° 48	0H 21M	63° 52′	G40	IIaOb	17	19°F	17 38	2/08	A
28757	HD 237056	〃 55.0	57 13	G40	IIaOb	17	14°F	2/23	0 08	B
28758	+10 4131	6 15	−2 54	G40	IIaOb	13	14°F	00 50	01 18	C
412-1	HR 2493	1965 06 41.8	1965 +25 10		TIME 20s	E=−800V		CENTRE 6201		
412-2	NGC 2549	08 16.1	+57 55		60s			0240		
−3	〃	〃	〃		〃			3 03		
−4	HR 3800	9 32.1	36 : 33		20			3 30		
−5	NGC 2768	9 09.0	+60° 12′		60s			4 00		
−6	NGC 2880	9 26.9	+62 40′		60s			4 48		
−7	HR 2473	06 41.8	[illegible]		20s			06 09		
−8	〃 4755	12 32.2	+4 33		20			0639		
28758T	Calibration	Step Wedge	for plates	28755	−58					

Dome Temp. Focus 52½ Dome Temp.

Hour Angle End

Dome Temp. 19 °F 0115 +11°F — heavy dew in low N all night 2300; clear overhead.

Transparency Conditions ... good

Focus 52½ 150 — HAND SWITCH FOR δ SETTING BROKEN (NORTH) fixed Hr 0100

Dome Temp. ...

214

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS (spectrograph at north dock mirrors)	Quality
	W2h 19	64 14		10	Brace	15-15-15	Cu-Be field 04	F800/36 (Lunch Plate fogged) fair
	W 2h 45	57 29	1→00	9.02	Bausch pe	15-15-15	Cu-Be field 04	#800/54
	00 H2W	−02 54	00	6.5	M1	15-15-15	Std Vel	#208/50 fine
	CENTRE 0056W	SS. CHART A-4		3.18	G8Ib		HβN B-2 / HβW A-3 / 45 A-6 / 42 B-3 / 41 B-3 / 38 B-5 / 35 B6	
	00005W	A-1		12.2	G4		D-6 / D-3 / D-5 / D-6 / D-6 / 2nd D-5 D-6 / D-5	
	W0 24			"	"		D6 / D-3 / D-4 / D-6 / D-5 / D-5	
	E0 25			4.62	G8III		B5 / A6 / B3 / B4 / B4 / B6 / B6	
	N0 28			11.2	G5		D6 / D3 / D4 / D5 / D5 / D5 / D5	
	W0h 39m			12.6	G4		D5 / D3 / D5 / D6 / D6 / D6 / D5	
	0505W			3.18	G8Ib		B-2 / A3 / A-6 / B3 / B-3 / B5 / B6	
	0015E			4.13	G0V		B4 / A5 / B2 / B3 / B3 / B3 / B4	

215

Date December 20/21 **Observer** [illegible] – Mrs **Julian Day** .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
~~28758 F1~~	~~focus test~~	~~test~~		G40			~~F°~~			A
28759	H1 J1311	23h 43m.4	-0° 56'	G40	IIaO-B	13	17°F	17:55	28 1 8 5 1	A
~~28760~~	~~H1 J1384~~	~~23h 52~~	~~-0° 3~~	~~G40~~	~~IIaO-B~~	~~13~~				~~A~~
28759F	focus test						18°F			A
413-1	HR 603	0 15.3	38 30	t = 20 sec			Round II = Standard Source A4			
2	M31 nucleus	0h 40m.0	+41° 00'							
-3	M31 outlying nucleus (2' south)			t = 60 sec.						
-4	M32	0h 40m.0	+40° 36'	t = 60 sec.						
-5	α And HR617	2h 05.1	+23° 18'	t = 20 sec				~~2~~		
-6	HR 1036	3 22.9	+8 55'	"				21 55		
-7	HR 603	0 15.3	38 30	t = 20 sec				22 15		
-8	NGC 1700	4h 55.1	-4° 54'	t = 60 s				23 18		
-9	HR 1577	4 54.7	33 06	t = 20 s				23 54		
-10	α And	2 05.1	23 18	"				0 12		

Dome Temp. 25°F

Focus 51

Dome Temp.

Transparency Conditions

219

red evening light on spectroheliograph

Hour Angle ~~End~~ MIDDLE	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						~~Focus 51~~	
W 0	45 - 06° 35"	0	6.3	gK4	15-15-15	~~51~~ / Exposure 1/125 - 100 / STRETCHED 2 2 3/5 9 VARIETY STAR	1 week
			~~6.49~~	~~B8~~		~~B8 - A9~~	
						Focus 51	continued
						H β N H β W 45 42 41 38	35
0h 51m W		<3"	4.44	A2 V		B5 A6 B2 B2 B2 B3	B4
0h 47m W			4.33			D4 C5 D2 D3 D3 D4	D5
						D4 C6	
1h 17m W						D5 C6 D3 D4 D4 D4	D5
1h 5m 8W			9.06			D2 C4 C5 D2 D2 D3	D3
1h 11 W			2.23	K2 III		A5 A1 A3 A5 A6 B3	B3
W 0 12			3.80	G8 III		B4 A5 B2 B3 B3 B5	B5
W 3 40			4.44	A2 V		B5 A6 B2 B2 B2 B3	B4
W 0 04			12.1	G4		D6 D2 D4 D5 D5 D5	D5
W 0 42						B2 A3 A5 B3 B3 B6	
W 3 47			2.23	K2 III		A5 A1 A3 A5 A6 B3	B3

217 - Hg 'phoned – not able to observe

Date 21 Dec 65 Observer Mce Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
413-H -1										
28760	HD 43703	6h 12.6	+23° 03'	G40	IIaOb	17	18°	1 02 38	2 18	A
28761	HD 62729	7h 40.3	-15° 52'	G40	IIaOb	17	18°	2 25 40	3 45	B
28762	HD 92124	10h 33.1	45° 22'	G40	IIaOb	17	17°	3 54	7 04	C
28762T	Calibration Step Wedge for plates 28759-62									

Dome Temp.
Focus 52
Dome Temp.

Hour Angle End

W1 H 42

W1 H 43

W1 H 04

NS

Dome Temp. 22° F

Focus 52

Dome Temp. 18° F

Transparency Conditions ~~...~~ good seeing

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W1 H 42	23 03	1	9.06	B11 pe	15-15-15	Cn Be FIELD DRAWN	800/60 good exposure
W1 H 43	-16 00	0	8.29	B3e III-V	15-15-15	Cn-Be Field drawn	800/60 fine guiding good exposure
W2 H 08	45 03	1-2	9.76	K5	15-15-15	Hd-KAFS Field drawn	~~800/200~~ 800/119

NOTE TO FRANK: ~~THE RED WARNING LIGHT ON THE SPECTROGRAPH (PLATE HOLDER IR UNDER) IS BROKEN~~; ~~ALSO IR~~ ILLUMINATION IN WARMING ROOM BURNT OUT.

FIXED

219

Date 21-22 Dec/65 Tues-Wed Observer Hm - Hs Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28763	HD 223311	23 43.4	-06 56	G40	IIaOb	13	22° F	18 57	~ 19 45	A
~~28764~~	HD13669	2 08.2	55 ~~20~~	G40	IIaOb	13				B
										C
							std sec.			
714-1	HR63	0 15.3	38 30	t=	20 sec		A4		19 31	
-2	NGC 221	0 40.9	40 41		60 sec		A4		19 55	
-3	NGC 205	0 38.4	+41 30		60 sec		A1		20 32	
-4	NGC 821	2 06.4	10 51		60 sec		A1		21	
5	HR 1577	4 55	33 06				A4		22 35	
28764	HD 65583	07 54.3	+29 31	G40	IIaOb	13	20°	02 34 36	03 46	B
28765	TT Leo	09 54.9	08 31	"	"	"	"	04 23 8	04 39	C
28766	HD 92588	10 36.3	-01 13	"	"	"	"	04 58 59	06 56	A
28766T	Calibration Step Wedge			for plates 28763-66.						

Dome Temp.
Focus 5.3
Dome Temp.

Hour Angle End
01 56 W
WI 00
WS 58
W 37.5
WC 57
E 1.0
0344 W
0258 W
0202 W
(9R

Dome Temp. 28° F

Focus 53 / 52.8

Dome Temp. ..... VERY GOOD

Transparency Conditions clouds at sunset then clearing

220

CLOUDS BEFORE MIDNIGHT, CLEARING AFTER 0130

MSE FEELING PUNK, SENT HIM HOME

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
19h	A	01 15 W	-6 33	0	6.3	gK4	15-15-15	Std. Vel. (REGRAPPED IRON ARC CAPPER CAME APART) 400/100	fine
	B				8.45	B2e III-V		On-BC 800/60	
	C							HβN HβW 45 42 41 38 35	
19 31		W1 H 00		2"-3"	4.44	A2 V		B5 A5 B2 B2 B2 B3 B4	
19 56		W0 H 58				EG(HP)		O5 C6 D3 O4 D4 D5 D5	
20 11		W1 37.5	field star?		8.89	AB		O6 A2 D4 D5 D5 D5 D5	
20 31		W0 57	double star		12.0	E2 G5		O5 D2 O4 D5 D5 D5 D4	
20 51		E1 0		4"	2.90	K3 II		B2 A3 A5 B3 B? B6 B6	
3M		0134 W	+29 19	1-2	7.9	G7	15-15-15	STD. VEL 800/120	fine
		0025 W	+08 14	1	6.31	M2 III	15-30	MK STD. 200/50	fine
	A	0202 W	-01 32	1-0	7.4	K1	15-15-15	STD. VEL. CLOUDS 200/~~50~~ 33	guiding

MORE ✱'s NEEDED for 2nd HALF!!

also there are 2 B13's (9th mag) at 10h +45° listed. Hd

there are plenty of B8-B9 stars right to α = 16h. (Hb)

221

Date 22/23 Dec /65 Wed - Thur **Observer** Hb, McL / **Julian Day**

Dome Temp. 3
Focus 55
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28767	HD 9812	01 30.8	+58 08	G40	IIaO6	13	26°F	18h 27m 46s	19h 58m	A	0° 11'
28768	HR 1161 HD 23594	03 41.3	+56 49	G40	IIaO6	13		20h 08m 36s	21h 00	B	10 58W
~~28769~~	~~HD 27650~~	~~04 16.6~~	~~+42 12~~	~~G40~~	~~IIaO6~~	~~13~~				C	
~~28770~~	~~HD 27777~~	~~04 18.0~~	~~+33 54~~	~~G40~~	~~IIaO6~~	~~13~~					
28768T	Calibration Step Wedge for plates 28767-68										

Sun Dec 26-27 – a perfectly clear night, but the shutter rails were hopelessly iced up after the rain and snow of Dec 24-25, even though the sun shone all day on 26th (Temp. ~ +10F)
— Hd.

1845 Echo (W→SE) azimuth

Dome Temp. 34 °F

Focus 5.5

Dome Temp.

Transparency Conditions (Fair) some absorption (⅔ m)
Scattered Cs from fire to west
→ POOR after 1900 EST.

222

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 11m W	+58° 27′	0-1	7.4	B5 V	15-15-15	B Std. Vel	450/15′	good
00 58 W	+57° 00′	1+	6.5	B9	15-15-	B8-B9	2100 foot erected on north & south piers	400/~~15~~	weak
			~~6.0~~	~~B9~~		~~B8-B9~~	450/15′
			5.5	B8		~~B8-B9~~	

clouds up 2115′ — frost on inside of telescope and on lower half of 74" mirror — quite thick on lower end of tube ..... NUTS!

223

Date Jan 1/2 1966 Observer RC Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle East
28769	H D 6960	01h 50	+63°40	640	IIAO	13	35°				

Dome Temp. 35°

Focus

Dome Temp.

Transparency Conditions

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			5.5	139		clouded in so Dec't on it ! (Focus 5.5)	

2/∞ - L fixed shutter

225

Date 3-4 Jan 1966 (Mon & Tues) Observer R.C. - 1 Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28769	HD 25752	3h 54.7	+36°	64°	IIaO	13	28°	21:32	22h 13	A	0:38
28770	HD 28867	4h 27.8	+17°	64°	IIaO	13	28°	22h 28	22h 5	B	1:24 W
28771	HD 35656	5h 21.2	+6° 47	64°	IIaO	13	28°	23h 08	23 35	C	20 42 W
28772	HD 39280	5 46.5	+19 50	64°	IIaO	13	28	23 40	23 [illegible]	B	
~~28772~~	~~HD 39280~~	~~5~~	~~+19~~	~~64°~~	~~IIaO~~	13					
28772 T	Calibration	Step wedge	for plates	28769 - 72							

Dome Temp. Focus Dome Temp.

Dome Temp. 32°F

Transparency Conditions very good

226

Focus .....

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0h 50	36 54	0	6.31	B9	15-12-15	B8-B9 mag	fine
1h 04	17° 56	0	6.19	B8	15-15-15	B8-B9	fine
00 42 W	6 52	0→1	6.37	B9	15-15-15	B8-B9	fine
0 31	14 52		5.48	B9	15-15-15	B8-B9	fine
				B9			

shutters from start at first of night - cloud also. fours-6 2 00/15 fours-5 800/60 fours-6 800/60 some clouds 800/60

completely closed up 2130

227

Date 4-5 Jan 66 Tues-Wed Observer Re Cn - Inse Inyl Julian Day

Dome Temp.
Focus 56
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28773	HD 13669	02 08.2	+55 20	C40	IIa-B	17	29°F	17 39 49	19 07	A	
28774	HDE 237056	02 55.0	+57 13	C40	IIa-B	17		19 10 53	20 56	B	
28775	BD 59° 612	03 07.3	+59 33	C40	IIaB	17		21 06 53	22 52	C	
28776	HD 41335	05 59.4	-06 42	C40	IIa-B	13	29°F	23 02	23 15	A	
28777	"	"	"	"	"	"	"	23 16	23 30	B	
28778	HD 44458	06 16.8	-11 44	C40	IIa-B	13		23 37	23 51	C	
28779	"	"	"	"	"	"	"	23 52 8	00 08	A	
								MIDDLE			MIDDLE
414 ~~1~~	HR 2473	6 41.8	15 10	t = ~~15~~ 1 sec				0 1 ~~m~~ 8			~~0 0~~
-1	~~HR 2990~~							0	37		
-2	HR 2990	7 43.2	28 07	t = 10 sec				0	58		
-3	HR 3410	8 35.8	+5 50	t = 15 sec				1	15		
-4	HR 3454	8 41.4	+3 31	t = 15 sec				1	36		
-5	HR 3800	9 32.1	36 33	t = 15 sec				1	48		
-6	HR 3815	9 33.7	35 59	t = 15 sec				2	04		

Dome Temp. 35°

Focus 56

Dome Temp. 31°F

Transparency Conditions bright morn. Excellent

228

DOME VERY SLOW TURNING

Fading Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	00 28E	+55 39	1	8.25	B2 [illegible]	15-15-15	Cu Be Field checks	800/60 fine
	00 35W	+57 28	1	9.02	B0.5 V pec	15-15-15	Cu-Be Field checks.	800/60 Lousy
	02 19W	+59 48	1	9.33	B1 V pne	15-15-15	Cu-Be Field checks	800/60 Lousy
	00 07E		0	5.13	B2 ne	15-15-15	Cu-Be	200/12 fine
	00 08W		0	5.13	Fine	50	Cu-Be	200/12 fine
	00 12W	-11 45	0	5.62	B1 Ipe	10 C10	Cu-Be	200/10 fine
	00 27W			5.62	B1 Vpec	10 C10	Cu Be	200/12 fine

① Slit face is dirty - line just above slit. [SINCE BEFORE XMAS]
② Dome turns very slowly (of all!)

	MIDDLE						HβN	HβW	45′	42	41	38	35
~~WO 28~~				3.18	G8Ib		~~B3~~	A4	A6	B4	B4	B6	C2
WO 39							B3	A4	A6	B3	B4	B6	C2
EO 05				1.21	K0 III		A5	A1	A3	A5	A5	A6	B2
EO 40				4.18	A0 V		B5	A6	B2	B2	B2	B3	B4
EO 30				4.32	B3 V		B4	A6	B2	B2	B2	B2	B2
E1 04				4.62	G8 III		B6	B2	B4	B5	B5	C2	C2
EO 50				5.48	G8 V		C2	B3	B5	C2	C2	C3	C3

229

Date 5 Jan / 66 - Wed **Observer** **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
414-7	HR2473	6 41.8	25 10	t=15 sec				2h 19			W2 17
-8	HR2990	7 43.2	28 07	t=10 sec				2h	34m		W1 31
-9	HR2473	6 41.8	25 10	t=15 sec				2	55		W2 50
-10	HR3800	9 32.1	36 33	t=15 sec				3	11		W2 2
-11	HR3815	9 33.7	35 59	t=15 sec				3	32		W0 36
-12	HR2473	6 41.8	25 10	t=15 sec				3	55		W3 38
-13	HR3410	8 35.8	15 52	t=15 sec				4	13		N2 17
28780	HD103095	11 47.2	38 26	G40	IIaOb	13	27	05 04 23	05 50	A	W. 39
28781	HD115043	13 09.5	57 14	G40	IIaOb	13	27	5 56 31	06 58	B	E0 03
28782	HD115612	13 13.2	68 56	G40	IIaOb	13	27	06 34 2	06 48	C	W0 12
28783	80 UMa	13 21.2	55 30	G40	IIaOb	13	27	06 52	06 56	A	W0 13
28784	"	"	"	"	"	"	"		07 03	B	
28785	"	"	"	"	"	"	"		07 03	C	W0 20
28785 F1	focus test	in in	out out	G40	IIaO(6)	13	"			A	
28785 T					-8773	-85					

Dome Temp.
Focus 55
Dome Temp.

230

Dome Temp. 31°F

Focus 55½

Dome Temp. 28°F (MIDDLE)

Transparency Conditions good - cirrus in N

3:30 - cirrus coming up from S

Hour Angle ~~End~~	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HBN	HBW	REMARKS 45	42	41	38	Quality 35
W2 17			3.18	G8Ib		B3	A4	A6	B3	B4	B6	C2
W1 31			1.21	K0III		A5	A1	A3	A5	A5	A6	B2
W2 54			3.18	G8Ib		B3	A4	A6	B3	B4	B6	C2
W0 19			4.62	G8III		B6	B2	B4	B5	B5	C2	C2
W0 38			5.48	G8V		C2	B3	B5	C2	C2	C3	C3
W3 54			3.18	G8Ib		B3	A4	A6	B3	B4	B6	C2
N2 18			4.18	A0V		B5	A6	B2	B2	B2	B3	B4
W0 39	38 00	1→0	7.3	G5	15-15-15	Std. Vel.		(cirrus) [comes 55½]			800/120	
E0 03	56 54	0	7.30	G1V	15-15-15	Mk std		(½ NORM)			800/60	
W0 12	68 35	0	6.09	B9	15-15-15	B8 B9					400/30	
W0 13		"	4.01	A5V	50	Mk std		(NORM.)			200/15	
	55°12'	"	"	"	50	"		(½ NORM)			200/8	
W0 20		"	"	"	50	"		(¼ NORM)			200/4	
					50/50	~~Grio filters~~		unable to find Grio filters ✓				

231

Date Jan 5-6/66 Wed **Observer** Hd Irwin **Julian Day**

Dome Temp.
Focus 5
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H.	Hour Angle Mid
28786	HD13669	02 08.2	55 20	G40	IIaO	17	+30F	18 43	21 39	B	
28786T	Calibration Step Wedge for plate 28786										

Dome Temp. 31 F

Focus 56½

Dome Temp.

Transparency Conditions Poor v getting worse 232

(*) Copper coupling came apart - set screw gone : Bearing please fix.

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	3	02 14 W	55 39	1	8.25	B20 [III-V]	15-15-15	Can Be Wrong * at first Then trouble with coupling * 800/51 some light snow or mist? — Closed.	fair

233

Date Thurs/Fri Jan 6/7, 1966 Observer AJ HB – Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
28787	HD 27650	04 16.6	+42 12	G40	~~Ea~~ 06	13	30°F	19 49 16	20 20	A	01 11E
28788	HD 27777	04 18.0	+33 54	G40	Ea 06	13	30°F	20 29 7	20 43	B	00 55E
28789	HD 28459	04 24.2	+32 14	G40	Ea 06	13		20 47 19	21 25	C	00 11E
28787T	Calibration Step Wedge for plates 28787-89										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 33°F

Focus 5.6

Dome Temp.

Transparency Conditions 1945 - good

2040 - thick Ci 2100 overcast (~2 mag extinction)

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		01 18E	+42° 22'	0-1	5.96	B9	15-15-15	B8 - B9 Prog ~~400/30~~	Plate ~~fair~~ fair
		00 53E	+34 04		5.53	B8	15-15-15	B8 - B9 " 450/30	fair
		00 16E	+32° 25'	0-1	6.17	B9	15-15-15	B8 - B9 " ~~cloudy~~ clouds developing 400/~~219~~	fair

235

Date Sat/Sun Jan 8/9 '66 Observer Re A. / Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28790	HD 13669	02h08.2m	+55° 20'	G40	IIaOh	17	+6°	19 10	21 30	B	2.4 W
28791	HD 27959 HR 1371	04h 16.6	+42° 12'	G40	IIaOh	13	+6°	21 42	21 58	C	1.6 W
28791F	Focus test			G40	IIaOb	13	+2° F	22 40		B	
28791T	Calibration Step Wedge for plates 28790-91										

Clouds often cover then

Dome Temp. +5°

Transparency Conditions Excellent

236

Focus 48'

Dome Temp. .....

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								Clock Drive very stiff; Blew 2 fuses reset it started o.k.	
5.30	2	02 12 W	56° 39'	0-	8.25	B2e [B7-Y]	15-15-15	Cramptons Be platform Fine Emulsion 800/50	fine grain
01 7	2	00 32 W	42° 23'		5.96	B9	15-30	B8-B9 few clouds... SNOW 800/14 only	Super fine grain tipped
								↳ Probably fogged as copper broke	
								22'00 completely cloudy. Clear up	
								Copper coupling fixed	
							3-3	Temp 43 at 5 +2°F	cont to end.

237

Date Mon/Tues Jan 10/11 Observer Db / Mce Rc / Hb Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28792	[illegible]	[illegible] 3	[illegible]	[illegible]	[illegible]	[illegible]	25°	[illegible]	[illegible] 34	C	0h 51W
~~28793~~	〃	〃	〃	〃	〃	〃	20°	19h [illegible]	20h 3	B	1h [illegible]
28793	〃	〃	〃	〃	〃	〃	~~17°~~	20 23	20 45	C	1h 8W
~~28794~~	HD 30122						14°	21h 8		B	
28794	HD 41035	6 3.4	+8 41	Gr 0	IIa 0b	13	14°F	0 09	~~0 27~~ 1 27	7	W1 23
28794T	Calibration Step Wedge for plates 28792-94										

Dome Temp.
Focus
Dome Temp.

Dome Temp. +20°

Focus 55.6 initial

Dome Temp. .....

clearing after 11:30 PM 238

Transparency Conditions Average - partly cloudy with V. high wind

POOR SEEING
POOR SKY
HIGH WIND

seeing terrible - better later

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		0h 57m W	+25° 2'	0"	5.4	139	15-15-15	Couldn't get Dome started to move	fair
		1h 36m W	+25° 5'	"	"	"	15-15-15	(Foc 52.8) - Not capped. for Guide focused	
		2h 9m W	35° 5'	"	"	"	1515-15		strong
								Started E W - A good thing once Plate was to ended for plate-holder - would fall through	
27		W1 23	+8 42	0"	6.43	139	15.30	38-139 focus 50½ 800/60 ½	weak.
								clouded in again clouded up completely 0 200	
								SHUTTERS OPENED & CLOSED WITH DIFFICULTY	

239

Date Tues-Wed/Jan 11/12 1966 Observer Re Cn – Hr Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28795	HD 13669	02 08.2	-55 20	G40	IIa-O	17	10°	17 52	20 20	A
28796	HD 23662	03 41.8	+68 12	"	"	13	5°	20 30	21 04	B
28797	HD 26670	04 08.1	+61 36	"	"	"				C
28797	HD 38010	05 37.5	+25 24	G40	IIa-O	17	2°	22 34	23 14	C
28798	"	"	"	"	"	"		23 15	23 57	A
28799	HD 49787	06h45.0m	-05°24'	"	"	"	1°	00 01	1 37	B
28800	HD 58601	7 21.5	48 24	G40	IIaO	13	-2°	01 45	2 02	C
28801	HD 66684	7 59.6	+27 49	G40	IIaO	13	-2	2 06	0240	A
28802	HD103095	11 47.2	38 26	G40	IIaO	13		0257	0447	B
28803	HD123782	14 04.6	49 56	G40	IIaO	13	-5	5 15	6 13	C
28804	HD144579	16 21.5	39 24	G40	IIaO	13	-6	6 21	0657	A
28804E	Spectrum in/out Comp				IIaO	13	-6			B

240

Dome Temp. 9°

Focus 49/47/45/44

Dome Temp. −7°F

Transparency Conditions Good

20 45 – completely clouded over for 10 min (clouds low S.W.)
21 – cleared – then clouded over again

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
	01 13 E	+55 40	0	8.25		15-15-15	Cu Be	800/50	fine
	00 23	+68 24	0	6.28	B8	15-15-15	B8-B9 CLOUD 20h 50m	800/50	fine
				5.59	B9		B8-B9 20 50 clouds in from S.W.		
							21 15 closed shutters		
							22 30 opened again		
	00 40 W	+25 27	0	6.87	B8 pe	15-15-15	Cu Be Focus 45	800/60	fine
	01 21 W	"	0	"	"	15-15-15	Cu Be	800/50	fine
	W1 56	−05 27	0	7.49	B8 p.e.	15-15-15	Cu Be Field clock	800/60	fine
	01 43	48 16	0	5.55	B9p	15-15-15	B8-B9 ~~focused~~ 45	800/60	fine comp weak comp weak
	01 45 W	27 38	0	6.14	B9	15-15-15	B8-B9	800/60	comp weak
	00 04 W	37 58	00	7.3	G5	15-15-15	Std. Vel.	800/120	fine comp weak
							TRIED FOR 1.5 10 1 32 E – TOO CLOSE TO MOON.		
	E 0 46	49 37	00	6.8	M2	15-15-15	Std. Vel. focus 47	800/200	comp weak
	01 38 E	39 15	00	7.2	G8	15-15-15	"	800/54	comp weak
	UNEXP. PLATES				IN		N.P.I.E.R.		O.K.
					5/5		← G10 filter		

241

Date Wed Jan 12-13/66 Observer Hd Mf Julian Day

Dome Temp.
Focus 46
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28905	5 Lac	22 25.4	+47 12	64"	IIa-O	13	+21°	18 06	18 12	A	1/2 1/4
06	"				"	"	"	18 16	18 19	E	1/3
07					"	"	"	18 30	18 41	C	1/3
08	"							1847	18 50	A	1/33
28907	Calibration Step Wedge for plate 28905-08										1/30

Dome Temp. +8

Focus 46/

Dome Temp. +6

Transparency Conditions

Ending Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
12	F	W2 h 5 F	+47 48	2	4.51	K0+A0	22/22	Hynek Comp sp. Focus 46 Exp. Meter not working	ok comp 1 weak
17	C	W 3 02	"			"	22/22		1 weak
7	C	W 3 24	"				45		1 weak spectrum line VV weak comp. guiding VV weak comp
50	F	W 3 33	"				45		

Warning — Declination North sticks on V/Has to be banged to stop telescope Somebody fix

switch

— Later. Trouble may OK now

243

Date Fri-Sat Jan 14-15 1966 Observer Cn - Hb Julian Day

Dome Temp.
Focus 525
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
Considerable snow & ice in dome, mirror cell & on S Pier. The wind blew											snow f
Plateholders A, B, C were found in observing hut. Plateholder C was found											broken!
28809	HD 38010	05 37.5	+25 24	C40	IIa-O	17	20°	22 19	22 55	H	1.72W
28810	HD 49787	06 45.0	-05 24	C40	IIa-O	17		23 03	00 10	P	00 4W

Dome Temp. 17°

Focus 525/16

Dome Temp.

Transparency Conditions Clouds & haze early in evening 24h
Clearing in 22h
23h 10m - l. cloud in N
0h - cloud moving in from N & W.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
snow from upper dish!							
loaded! why?	Plate removed, marked X & put in "Exposed Plate" tray.						L
00 32 W	+25 28	0	6.87	B1V ipe	5-15-15	Cu Ba	Right ascension - see finder field 540/60 fine
~~00 41 W~~	~~-05 26~~	~~0~~	~~7.49~~	~~B1V ipe~~	~~5-15-15~~	~~Cu Ba~~	field check, Clouds 0h 02m 800/60 probably no exposures after this time (Comet Brooks ...)
Closed up 00 20 - few snowflurries							
Little flashlight reds - see outlet (?)							

245

— L, Hr

Date Sat./Sun JAN. 15/16 1966 Observer Re/Ai Mel Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.
2884 (10)	HD 4622	00h 43m.0	-22° 16'	G40	IIaOb	13	12°	17:46 (12)	18:10	C
2884 (12)	"	"	"	"	"	"	11°	18:12 (13)	18:38	A
415-1	HR 617	02 05.1 (1965)	+23°18' (1965)	t=20s			800 V		middle 07.07	
415-2	NGC 821	02h06.4	+10°51	t=60s					middle 19:39	
415-3	NGC 1023	02h38.0	+38°57'	t=30s				variable	20:51	
415-4	HR 617	02h 05m.1	+23°18'	t=20s					21:23	
415-5	HR 1577	04h54.7	+32°06'	t=20s					21:48	
415-6	HR 1641	05h04m.0	+41°12'	t=20s					22 29	
415-7	HR 2473	06 41.8	+25 10	t=20s					23 20	
415-8	HR 617	02h 05m.1	+23°18'	t=20s					23 41	
415-9	NGC 2549	08h 16m.1	57°55'	t=60s					00 15	
415-10	NGC 2768	09 09.0	60° 12'	t=60s					0116	
415-11	HR 3601	09 52.1	36 23		20s				0200	
2888 (15)	HD 92588	N 26.3	-01 13	G40	IIaOb	17	-6	0307 (29)	0605	B
2888 T	Calibration Step Wedge #			plates 2888-9-12						

Dome Temp. Focus 49 Dome Temp.

Dome Temp. 10°F

Focus 49 43.2

Dome Temp. .....

0600 Clouds.

Transparency Conditions Fair
sky bright at first
Excellent ~2200 on

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
18:10	0h 49'W	- 22° 09'	0	5.4	B9	15-15-15	B8-B9 PROGRAM (EXTENSION) 800/60	fair
18:36	1h 18'W	"	0	"	"	15-15-15	" (SPECTROGRAPH HEAD MOUNTED) 800/40	fair
	middle						Hδ Hγ 45 42 41 38 35	
19:57	0h 24W		15"	2.23	K2 III		A5 A1 A3 A5 A5 B2 B3	
19:57	middle 1h 15'W			12.0			D6 D2 D4 D5 D5 D4 D4	
20:36	1h 35W			10.8	G5		D6 D3 D4 D6 D6 D5 D5	
21:03	2h 40'W			2.23	K2 III		A5 A1 A3 A5 A5 B2 B3	
21:45	0h 15m W			Mv. 2.9	K3 II		B2 A3 A5 B3 B3 B6 B6	
22:21	0 47W						B2 A3 A4 A4 A4 A4 A4	
22:40	0 01W		15"	3.18	G8 III		B3 A4 A6 B3 B3 B5 B6	
23:04	0 58W			2.23	K2 III		A5 A1 A3 A5 A5 B2 B3	
23:35	1 22E			12.2	G4		D6 D3 D5 D5 D5 D5 D4	
0:16	00 30 E			11.2	G5		D6 D3 D4 D5 D5 D5 D4	
0:26	0009E			4.62	G8 III		B5 A6 B3 B5 B5 B6 B6	
0:45	2 53 W			7.4	K1	15-15-15	STD. VEL. 800/170	strong

247

Date Wed Jan 19 Observer Cu, Re Julian Day

Done Temp.
Focus 52
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28812-T1	Sky	Blue sky at 11h EST	δ = 30°	C40	IIaO	7	19°	2s		A	0h30E
T2	Sky	telescope ½h E. Clr		C40	IIaO	7	19°	4s		B	0h32E
T3	Sky	setting 2×1=2, exp. mtr counts every 2 seconds		C40	IIaO	7	19°	8s		C	0h30E
		Jan 19/66		Nice							
28812F1	focus test runs/ outside			C40	IIaO	9	19°F			C	

Dome Temp. 20°

Focus 52

Dome Temp.

Transparency Conditions

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	00 30 E					2s no filter	SET 2/ 1 count	comp good I wk comp strong gd
	00 30 E					4s no filter	2/ 2	
	00 30 E					6s no filter	2/ 4	comp, strong fair.
						6/6 no filter (down 2½°)	(0-19)	19k

249

Closed up at 0500 EST

Date Fri/Sat 21/22 JAN 1966 Observer MCL Cm Hb Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.E.	Hour Angle End
									middle		
416-1	HR 617	02h 05.1	+23°18′	T=15s		800V			18 24		0h 05m W
416-2	NGC 821	02 06.4	+10 51	T=50s					19 07		0h 48m W
416-3	NGC 890	02 19.9	+33 07	T 60s					19 52		1h 33m W
416-4	NGC 1023	02 38.0	+38°57′	T=40s					20 35		2h 18m W
~~416-5~~	~~NGC 1270~~	~~03 16.6~~	~~+41°21′~~	Could find it							
416-5	NGC 1700	04 55.1	−04°54′	T=40s					22 06		0h 55m W
416-6	HR 617	02h 05.1	+23°18′	T=15s					22 35		1h 24m W
416-7	HR 617	〃	〃		〃				22 49		1h 38m W
416-8	HR 617								22 59		1h 48m W
416-9	HR 617	〃	〃		〃				23 10		1h 59m W
416-10	HR 2473	06 41.8	+25°10′	T=20s					23 37		0h 41m W
416-11	HR 2097	05 52.9	+20°16′	T=20s					23 53		0h 57m W
28813	RU CAM HD56167	07 10.9	+69 51	G40	IIaO	21 short	20°F	00 20 35	01 30	A	2h 34m W
28814	HD83650	09 34.9	−10 07	G40	Hack	13	20°F	02 38 13	03 03	B	0h 31m W
28815	HD96314	11 01.1	−26 45	G40	IIaO	13	19°F	03 13 28	04 08	C	0h 31m W
28816	HD111226	12 42.6	−24 18	G40	IIaO	13	18°F	04 15	04 24	A	0h 31m W

250

Dome Temp. 28°F

Focus 52.5/

Dome Temp. .....

Transparency Conditions Excellent - (clouds around horizon)
Thin clouds after midnight.
0335 clouds from south
0424: Snowing but no clouds higher than ~30° above S horizon!!!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS H3W	H3W	45	42	41	38	35	Quality
0h 05m W		5"	2.23	K2 III		A6	A2	A4	A6	A6	B3	B4	
0h 48m W			12.0	G5		D6	D2	D4	D5	D5	D5	D5	
1h 19m W			12.6	G4		D6	D2	D4	D5	D5	D5	D5	
1h 43 W			10.48	G5		D6	D2	D4	D5	D5	D5	D5	
0h 58m W			12.1	G4		D6	D3	D4	D5	D5	D5	D5	
4h 16m W		5"	2.23	K2 III		A6	A2	A4	A6	A6	B3	B4	
4h 30 W			11	11		11	11	11	11	11	11	11	
4 40 W						11	11	11	11				
4 51 W													
0h 41m W		9"	3			B3	A4	A6	B3	B4	B5	B6	
01h 47 W						G5	A6	B3	B4	B4	B4	B5	
01 59 W	+69° 45'	1	9.5	K0	15-30	Seeing OK (Cirrus clouds?) counting much to blurry					800/~~80~~ 13		fair
01 13 W	−10° 23'	1	6.2	B9	15-15-15	B8-B9 (SB)					400/~~30~~ 10		fair
00 51 W	−27 04	0	5.6	B8	15-15-15	B8-B9 (SB) d+e (0335 light clouds)					400/~~30~~ 8		fair+
~~00 34 E~~		~~0~~	7.1	B9	15-30	B8-B9 (SB) SNOW!					400/30		~~fair+~~

251 23/24 Sun/moon — 00:30 EST Shutters would not open. M Q

Date MON/TUES 24/25 JAN '66 Observer McC DLR RC MSG Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28817	HD 3765	0h 35.3	+39° 40′	G40	IIaD	17	18°	1808	19 02	A
417-1	HR 617	65/00h 05.1	65/+39° 18		T = 15 sec			middle →	19h 34m	
417-2	NGC 890	" 2 19.9	" +33° 07		50 sec			end →	20h 28	
417-3	NGC 1023	2 38.0	+38° 57		40 sec			4th 20h 37		
28818	HD58599	7 21.2	+11 12	G40	IIaOb	13	13° F	01 10	1 56	B
28819	HD 58661	7 21.5	48 24	G40	IIaOb	13	12° F	2 03	2 21	C
28820	HD 83650	9 34.9	−10 07	G40	IIaOb	13	12	2 29	3 21	A
28821	α Vir (SPICA)	13 20.1	−11 16	G10	IIaO	9		3:40	~3:45	C
28819T	Calibration Step Wedge for plate					28813-19				

Dome Temp.
Focus 50
Dome Temp.

Hour Angle End

Dome Temp. 14°F

Focus 50/10

Dome Temp. 10

Transparency Conditions Excellent

0300 – start evening of 7th, midnight partial clearing of 8th, mid-night

Ending Time E.S.T. P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	W 2h 26m	40°04	1	8.2	K5	15-15-15	N/A	fine
	mid. 1h 25m W		8"	2.23	K2 III		HBN A6 / HBW A2 / 45 A4 / 42 A6 / 41 A6 / 36 B3 / 35 B4	
	end 2h 04m W ✓			12.6	G4		D6 / D2 / D4 / D5 / D5 / D4 / D4	
							D6 / D2 / D4 / D5 / D5	4A OK Ending Time?
							Clouds!!!	
	W 2 30	+11 06	0	6.26	B 8	15-15-15	B8-B9 (EXP. RATES 600/60 IN UNEXP BOX #1)	fine
	W 2 5°348	17	0	5.55	B9p	15-15-15	B8-B9	fine
	W 1 42	-10 23	0	6.2	B9	15-15-15	B8 B9 600/60	fine
	E 1H 36			-0.24 / 0.7	B10	45	#20/3 counts	
	clouded in while setting on SPICA – G10						camera in 20's. what has happened to the small flashlight?	

253

Date TUES/WED, JAN 25/26 1966 Observer Gn – Mae HR – MCe Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28820	HD 3765	00 35.3	-39 40	C-40	IIa-O	17	9°C	19 05	19 35	A
28821	HD 22298	03 30.3	+54 50	C-40	IIa-O	17	5°F	19 45	20 55	B
28822	HD 37318	05 32.6	+28 24	C-40	IIa-O	17	5°F	21 02	22 52	C
28823 (28822-T)	HD 49797 Calculate Alt Coords for 1965	06 45.0 1965	-05 24 for 1965	C-40	IIa-O	17	3°C	23 00	23 44	A
								M.D		
418-1	HR 2990 (2421)	7 43.2	28 07		t=12 sec				0 06	
-2	NGC 2549	8 16.1	57 55		t=60 sec		+1°F			
-3	" 2768	09 09.0	+60 12		t=60s			0132		
418-4	HR 2990	7h43.2	+28 07		t=12s		+1°F	0212		
" -5	" 3800	9h32.1	+36 33		t=20s			2 36		
-6	NGC 3384	10 45.7	12 54 (9.50)		t=40s			3 17		
-7	HR 2990	7. 43.2	28 07		t=12s			0414	END	
-8	"	"	"		"			0421		
-9	NGC 4258	12 17.3	47 30		t=50s		-1°F	0451		
-10	" 4736	12 49.4	41 18		17s			0531		
-11	NGC 5055	13 14.3	42 12		t=50s		-2°F			

Dome Temp. 8°F

Focus 48/47/46

Dome Temp. .....

Transparency Conditions EXCELLENT

00 30 : heavy clouds over lake moving almost due West

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
02 58 W	+40 02	Q			15-15-15		fine
01 21 W	+55 04	0-1	1.20	B2e III	15-15-15	Cu Be	fine
01 17 W	+28 26	0-1	8.54	B9e III	15-15-15	Cu Be	fine
00 58 W	-05 27	0	7.49	B7 III pe	15-15-15	Cu Be	fine
MID						H3N H3W 45' 42 41 38 35	
W0 26			1.21	K0 III		A4 A1 A3 A4 A4 A6 A6	
—			12.2	G4		D6(5?) D2 D4 D5 D5 D4 D4	
00 25 W			11.2	G5		D6(5) D3(2) D4 D5 D5 D4 D4	
02 31 W		15s	1.21	K0 III		A4 A1 A3 A4 A4 A-6 A6	
01 07		10s	4.62	G8 III		B5 A6 B3 B5 B5 B6 C2	
00 34			10.9	G5		D6 D2 D4 D5 D5 D4 D4	
04 34 W	ENE		1.21	K0 III		A4 A1 A3 A4 A4 A6 A6	
04 41 W			"	"		" " " " " " "	
00 37 W			8.70	G0		D6 D2 D4 D5 D5 D4 D4	
00 41 W			8.71	G0		D5 D2 D3 D5 D5 D5 D5	
			9.26	F8		D6 D2 D4 D5 D5 D4 D4	

255

Date Wed 26 Jan Observer Hr Mse Mcl Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
418-12	HR 4785	12 32.2	41 33		t=20	See	-2		MID / 6.33	

Dome Temp.
Focus
Dome Temp.

Hour Angle End
MID
W 2.07

Dome Temp. -2°F

Focus .....

Dome Temp. .....

Transparency Conditions EXCELLENT! 256.

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS						Quality
MID						H/3 N	H/3 W	45	42	41	38	35
W2 07			4.3	GOU		B4	A5	B2	B3	B3	B4	B4

47.4
257

Date Wed Jan. 25/27 **Observer** HH **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28824	HD31373	4 50.2	+14 54	G 40	I a O	13	5°	21 25	21 39	A	W 5°
[illegible]	HD 3[illegible]	4 5[illegible]	[illegible]	"	"	"	3°	21 51	22 11	C	W 20' and W 5°
28826	HD 32273	4 56.8	+1 28	"	"	"	3°	22 23	about 22 45	B	
28826T	Calib. for Step wedge for plates 28824-26										

Dome Temp. [illegible]
Focus 47
Dome Temp.

Dome Temp. 7°

Focus 47.4

Dome Temp. ~~Wed~~

Transparency Conditions

258

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 0 50m	+14 59.	0	5.59	B8	15/15/15	B8-B9 400/30	fine
W 1 20	+14 56.9	0	5.9	B8	15/14/15	" 400/31	fine
W 1 55 alter	+01 34	0	6.16	B8	15/30	" clouds 400/10	l weak

259

Date Tucson Fri 27/28 Jan Observer Cu - Wise DB Wise Julian Day

Dome Temp.
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28827	HD 3765	0 35.3	39 40	G40	IIaO6	17	9°F	18 06	18 46	A	W 2 1/2
28828	HD 33461	05 05.3	+41 56	G40	IIaO6	17	6°F	20 09	21 24	B	W 4 1/2
28829	HD 42259	06 04.6	-05 03	G40	IIaO6	17	5°F	21 32	23 32	C	W 11 3/4
28830	BD 45°1859	10 38.3	45 12	G40	IIaD6	17	0°F	23 43	0203	A	E 9 1/2
28830 T	Calibration Step Wedge for plates 28827-30										

Dome Temp. 10° F

Focus 48/47/45/

Dome Temp.

Transparency Conditions very clear

IMPOSSIBLE TO WORK WEST OF MERIDIAN

very windy (NW)!!! 260

0030 some auroral activity

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	W2 21	40 03	1	8.2	K5	15-30	Std. Vel. clear but snow falling! #800/25	Lunate
	(Cloud shutter						– 20° thin clouds &	Snow
	W 00 24	+41 12	1	8.05	B2.5V and	15-15-15	Ca Ba Considerable image motion Telescope very unstable.	#40/40 fine
	W 14 35	+05 02	0-1	8.67	[illegible]	15-15-15	Ca Ba	#42 fine
	0028 E	44 53	0	9.59	F4	15-15-15	Hd KAFS FIELD DRAWN from 45°	800/33.5 Lunate

0230 LIGHT SNOW (& wind turned down)

TOO WINDY!!

261

Mse

Date 25-29 Jan/66 Fri - Sat. **Observer** Li - **Julian Day**

Dome Temp.
Focus 47.1
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I.	Hour Angle End
28831	HD17929	2 47.8	68 25	G40	IIaOb	17	4°F	18 10	18 54	C	(E) 13
28832	HD26570	4 08.1	61 36	G40	IIaOb	13	4°F	19 01	19 13	A	(E) 43
28833	HD27026	4 11.2	41 54	G40	IIaOb	13	4°F	19 17	19 31	B	(E) 32
28834	HD27742	4 17.6	+20 45	G40	IIaOb	13	4°F	19 35	19 49	C	(E) 21
28835	HD27777	4 18.0	33 54	G40	IIaOb	13	4°F	19 51	20 05	A	(E) 34
										B	
										C	
28835 1/2	focus test	in middle of		G40	IIaOb	13	4°F			B	

Dome Temp. 9°F

Focus 47/

Dome Temp. .....

~~9:00~~ clouds in N, W & S - UNSETTLED.

Transparency Conditions very good (+ very little wind)

note: it is appear to be the ~~wind~~ (winds) shaking time rod).

Ending Time E.S.T.	Pl	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
8 54		WO 13	68 43	0	8.1	B8	15-15-15	(Fair)	clouds #800/40	
9 31		EO 43	61 47	0	5.59	B8	15-15-15	B8-B9	#400/30	
9 31		EO 32	42 05	0+	6.07	B8	15-15-15	B8-B9	#400/30	guiding, guiding fine finding.
19 49		EO 20	20 56	0	5.87	B8	15-15-15	B8-B9	(upload & Focus) #400/30	
21 15		EO 04	34 05	0	5.53	B8	15-20	B8-B9	clouds #400/18	
		shutter closed f:30								
							5/5	610 fits		C.K
								closed up complete 2300		

263

Date 29/30 JANUARY Observer Re Ai Julian Day

Dome Temp. Focus 4 Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28836	HD 23324	03h 39.2	+24° 32'	G40	IIaOb	13	8°	18:11 20	18.51	C	00 34E
28837	16 Tau	03h 38.8	+23° 58'	G40	IIaOb	13	8°	18:59 11	19,17	A	00 09E
28838	"	"	"	"	"	"		1919	1941	B	01 11W
28839	17 Tau	~~03h 38.9~~	~~+23° 48'~~	"	"	"					
28838F1	Focus Test			G40		13	8°			C	
28838F2	"			"		"	"			A	
28838T	Calibration Step Wedge for plates				28831-35						

Dome Temp. 12°

Focus 49 /

Dome Temp.

Transparency Conditions POOR (HAZE)
19:30 – 1st mag. stars obscured by haze

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
R.S.	00 34E	+24° 45'	1	5.6	B8	15-15-15	B8-B9 SPEC. BINARY (should be OK later?) N (1/2 N 800/30) (1/4N 800/15)	800/60 fair
2h17	00 09E	+24° 08'	1-	5.5	B7IV	15-15-15	MK STANDARD	fair
2h41	00 15W	"	0	"	"	22-	" Thick haze Thicker haze Thickest haze!	POOR (scattered moonlight)
							Give up! FOCUS 49 "	fixed? O.K. O.K
						→	RED CAUTION LIGHT (PLATE, EXPOSURE METER CAVING) BURNT OUT FIXED	

265

Ph. A loaded in Npier

Date Thurs/Fri Feb 3/4 1966 Observer Mme Cu Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle East
25839	HD 17929	02 47.8	+68 25	C40	IIaO b	17	24F	18 53 35	20 03	V	01 SW
40	68 Tau	4 22.6	17 48.9	C10	IIaO b	9L		20 11 34	21 (21h) 19	C	W 23
25840 T1	Calibration Step Wedge for plate 25839										
25840 T2	"	"	"	"	"						

Dome Temp.
Focus 24
Dome Temp.

Dome Temp. 27°F

Focus 54/

Dome Temp. 22°F

Transparency Conditions Considerable cloud
19h - East half of sky cloudy
- considerable haze
- moon nearly full.
20h - more & more cloudy

Reading Time E.S.T.	P.A.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
0 53	P	01 45W	68 42	1-2	8.1	B8	15-15-15	Ferner	240/35 fine
21 19	P	W1 33	+17 23	3-4	4.2	A2V	15-15-15	Yip Eq. width UNUSUALLY SMALL IMAGE!!	200/203 fine
								21h CLOUDS	
								Closed up 21 30	

DH Ba C loaded = "pine.

267

Date February 4/5 1966 Observer ai / Pc Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.F	Hour Angle End
28841	HD 16219	$02^h 31.1$	$+39° 27'$	G40	IIaOb	.13	21°	19:12	19.44	C	
28842	RU Cam	$07^h 10.9$ (1950)	$+69° 51'$ (1950)	G40	IIaOb	.17	21°	20.06	22.34	A	
28843	α CMi	$07^h 36.7$ (1950)	$+05° 21'$ (1950)	G10	IIaO	.9	17°	22:51	22.59	C	
28844	"	"	"	"	"	"	"	23:09	23.25	C	
28944F				Focus	IIaL	G10				A.	
~~28845~~	HR 3745	$09^h 22.4$	-28.21								
28846	BD $+45° 1859$	$10^h 38.3$	$+45° 12'$	G40	IIaO	.17	16°	$0^h 21$	$3^h 33$	B	
28847	HR 4550	$12^h 44.4$	$-28° 5'$	"	"	.17	12°	$3^h 52'$	$5^h 07'$	C	
28848	HD 131861	$14^h 55.$	$+45° 43'$	"		.13	12°	$5^h 22'$	$6^h 40$	C	
28849T	Calibration Step Wedge for plates 28843-44										
28847T	Calibration Step Wedge for plates 28841-42, 45-47.										

Dome Temp. 22°F

Focus 53.5/52.5/51

Dome Temp.

Transparency Conditions 19.00 Poor. Dome Track Comm drifting. Comm up?

2000 clear

Ending Time E.S.T.	P.I.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS		Quality
	C	1h50mW	39°46'		5.6	B8	15-15-15	B8B9 Sp. Bin	400/30	fuzzy edges fine
	A	00h01E	69°44'	1+	5.5	K0	15-30	Demers' (Focus 52.5)	800/32	1 weak.
	C	00 06W	+05°21'		0.5	F5IV	18-18	Equivalent Widths (y,n)	40/40	fine.
	C	00 31W	"		"	"	18-18	"	40/70	strong.
	A							Some trouble from G10 → G40. Not fast down sure. finish tracking group. — Could not find —		O.K.
		1h24W	+45°52'	2	7.7	F7	15-15-15	Focus 51 KAFS	800/120	1 weak.
		0h50	-28°51'	Low Dec	6.5	B9	15-15-15	" " "	800/60	fine
		0h27W	+45°21'	1	7.6	F3	15-15-15	" " KAFS	800/120	fine.

269

Date Fri/Sat Feb 5/6 **Observer** Hb - L-Db (J.O.Hb) **Julian Day**

Dome Temp.
Focus 49
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28847	HD 28817	04 28.0	+17 29	G40	IIa-O	13	12°F	18:27	18 49	A	
28848	HD 28867	04 27.8	+17 48	G40	IIaO	13	12°F	18:55	19:19	B	
28850	HD 30122	04 35.7	+23 47	G40	IIaO	13	12°F	19:24	19:44	C	
28851	HD 28503	04 24.6	+39 48	G40	IIaO	13	12°F	19:52	20 31	A	
28852	HD 28843	04 27.6	-03 25	G40	IIaOb	13	11°F	20 38	20 52	B	
28853	HD 33224	05 03.6	-08 47	G40	IIaOb	13	11°F	20 59	21 15	C	
28854	HD 34788	05 14.9	-18 37	G40	IIaOb	13	11°F	21:21	21 54	A	
28855	HD 34797	05 14.9	-18 36	G40	IIaOb	13	11°F	21 57	22 24	B	
28856	HD 38206	05 35.0	-18 36	G40	IIaOb	13	11°F	22 30	22 47	C	
28857	HD 58773	06 [illegible]	-21 25	G40	IIaOb	13		22 53	23 15	A	
28858	HD 58612	07 21.2	-25 01	G40	IIaOb	13		23 21	23 45	B	
28859	HD 71833	08 24.4	-20 37	G40	IIaOb	13	10°F	23 52	00 37	C	
28860	HD 92104	10 33.1	+47° 22'	G40	IIaOb	17		00 50	03 10	A	
28860T	Calibration Step Wedge for plates					28848-60					

Dome Temp. 14°F

Focus 49.5

Dome Temp.

Transparency Conditions ..... clear - full moon
cirrus in south

Finding Time E.S.T.	P.R.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		00 47E	+11° 11'	0-	5.79	B2	15-15-15	B8 - B9 400/30	fine vel. fogged
		00 27E	+17° 59'	0	6.19	B8	15-15-15	B8 + B9 pwhubby exposed close double pix 1" 400/30	fine
		00 13E	+23 35	0	6.12	B8	15-15-15	B8 - B9 400/30	guiding
		01 13W	+39' 58°	0	6.21	B8	15-15-15	B8 - B9 400/30	fine.
		01 06W	-03°14'	0	5.89	B5	15-15-15	B8 - B9 400/30	fine
		00 54W	-08 40	0	5.62	B8	15-15-15	B8 - B9 400/30	guiding
		01 22W	-18° 32'	0-	5.17	B8	15-15-15	B8 - B9 400/30	Lweak.
		01 52W	-18° 31'	0	6.31	B8	15-15-15	B8 - B9 400/30 19	Lweak.
		01 52W	-18° 32'	0-	5.73	B9	15-15-15	B2 - B5 400/30	fine
		01 03W	-20 31	0-	5.4	B8	15-15-15	B5 - B9 —	fine.
		01 07W	-25 07	0-	5.5	B9	15-15-15	B8 - B9 —	fine.
		0 50W	-20 48	0	6.4	B8	15-15-15	B8 - B9 —	fine.
		1 18W	45 02	0	3.76	K5	15-12-15	KAFS heavy [illegible] 400/	Lweak guiding

EXPANTR. REMOTE — MEAN COUNTING DIRECTION 120° ARC

Light Clouds from 2300 on

Stars gone at 3.10

→ (Correct E.W.T. shutter disk + correct by guiding knob.)

271 found Plh B+C loaded

Date Jan/Feb 1917 Observer Hn Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28661	HD 23324	03 39,2	+24 32	64	IIa O b	13	15	1915	2015	B-
			left Plh Hold		C loaded					

Dome Temp.
Focus 5/1
Dome Temp.

Hour Angle End

272

Dome Temp. 15°F

Focus 5.1.0

Dome Temp.

Transparency Conditions Overcast early then large more clouds

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
			0	56	~~88~~	15	~~Taken through thin clouds~~ had to stop at 3.5 (out of 15 required) counts because of clouds. Three plate runs	
							closed up completed: 0400	

273

Date Wed Thurs Feb 9-10/66 **Observer** Hd Emp Nydy - McC **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28861	[illegible]	04 22.6	+17 48.9	G10	600	9 XL	30.0	19 17 80	20 56	A
28862	α CMi	07 36.7	+5 21.	G10	IIaO	9 XL		21 11 5	21 21	B
28863	" RU Cam	"	"	"	"	"	30	21 28 5	21 38	A
28864	HD 56167	07 10.9	+69 51	G40	IIaO	17 S	30.0	22 01 68	0 17	B
28562 T	Calibration	Step Wedge for plates 28561–63								
28564 T	Calibration	Step Wedge for plate 28564								

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. .....
Focus .....
Dome Temp. .....

very heavy condensation on mirror at end of plate

Transparency Conditions ..... Poor

fog

Ending Time E.S.T.	Pl.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
55	A	h 34m W	+17 ~~50.8~~ 53	0	4.2	A2 V	15-15-15	(bright streaks on plate) 2 exp 20	Poor
21	B	E 1 15	+5 20	0	0.5	F5-14	20-20	1 exp, hazy 40/43	fair
38	A	0 58m	"	0	"	"	20-20	40/40	fair
17	B	2 4 00	69 45	0	9.5	K0	15-15-15	80?	dark

IMPOSSIBLE TO BALANCE EXP FOR HUMID.

→ STAR NO LONGER VISIBLE.

Apparently in reaching 70° S, with this humidity, in turning the tube over a few drops of condensation collected on the mirror.

11 Feb/66 @40 Perturbation = 3 light loaded in 1 Pl.

275

Date Saturday (a.m.) 12 Feb, 1966 Observer HL Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28865	HD83650	09h 34m.9	-10° 07'	G40	IIaOb	13	32	00 55 18	01 30	A	
28866	HD96314	11 01.1	-26 45	G40	IIaOb	13	32	01 41 20	02 21	C	
28867	HD92728	10 37.4	+57 43	G40	IIaOb	13	32	02 33 17	02 53	A	
28868	HD92728	10 37.4	+57 43	G40	IIaOb	13L	32	02 56 45	03 30	C	
28869	HD131861	14 50.9	+45 43	G40	IIaOb	13	30°F	03 46 10	05 15	A	
28870	HD142301	15 48.7	-24 57	G40	IIaOb	13	30°F	05 26 10	06 06	C	
28871	HD146001	16 08.8	-25 13	G40	IIaC1	13		06 12	06 32	A	

Dome Temp.
Focus
Dome Temp.

Dome Temp. 33°F

Focus 57

Dome Temp. 29°F

Transparency Conditions fair (scattered cu after 0000) Poor after 0115

[DEC. BUTTON, FOR MOTION NORTH, ON WEST SIDE OF PIER NOT WORKING]

276

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
3.	01 01W	-10° 23'	0⁻	6.2	B9	15-15-15	B8-B9 (S.B) clouds interfere after 0115.	fine
							clouds	
21	00 26W	-27° 04'	0	5.6	B8	15-15-15	B8-B9 (S.B) several magnitudes absorption	streak
23	01 21W	+57° 24'	0	5.8	B9	15-15-15	B8-B9 (S.B)	fine
30	01 58W	+57° 24'	0	5.8	B9	15-15-15	" "	streaky
15	00 28E	+45° 26'	0+	7.64	F3	15-15-15	KAFS BINARY	fine
36	00 36E	-25° 05'	0+	6.2	B8	15-15-15	B8-B9 (SB)	fine
32	00 30E	-25° 21'	0	6.7	B9	15-15-15	B8-B9 Prog.	tuk.

Ph A and C were found loaded — one in cupboard and the other on counter in north pier. Ph B could not be found — a poor way to leave things. [HS].

277

Date ..... Observer ..... C ..... Julian Day .....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
									20h10		
28874	HD 39286	5h46.0	+19°30					20h21	21h06	A	
28874	Calibration Step Wedge for plates 28865-74										
	Feb 14 1966		Cu.		Cu, Hd, L			removed	640,		u-alig
28874 F1	Focus Test	Dec. Drift		640	IIaO	13	29°	Focus	57	A	
F2	"	"	"	"	"	13	27°	Focus	45	A	
F3								Focus	47	B	
F4									49	C	
F5									51	A	
F6									53	B	
F7							26°		51	C	

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... Several mags. 7 Aborgtes - Intermittent Cloud - hid haze

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	0h 0 E							
	0h 52m W						exposure meter wont stay balanced	
	2h 29m W	19° 53	0	598	[illegible]	15"	B8-B9 forms 7 haze thickened into cloud 8m / 6°	
							in an attempt to correct doubling I the dispersion	
640	re-aligned mirror and put in a new B&L grating.							
57						25/25	640 filter	wk C to vc
55			G10 filter			5/5		
47				"		"		
"				"		"		
41				"		"	Best focus but lines double	
33				"		"		
51				"		"		

279

Date Feb 14-15 1966 Observer Cr, L, Ha, Stevenson Ld, Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.B.
Test	Tf guiding device			19" – 22"						
	Feb 15	1966	Cr, Ld, L							
28874 F8	Focus Test	2-2	10 V. Cent	240	IIaO	13	20°F			B
F9	Focus Test					13	25°			A
F10						13				H
F11						13				E
F12						13				C
F13						13				H
F14						13				E
F15	Focus Test					13				A
F16	"	Focal	Aperture			13				C
F17	Focus Test					13				B
18	Focus Test					13				D
19	Focus Test					13				

Dome Temp.
Focus
Dome Temp.
Hour Angle End

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ... Poor - some cloud all night

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							Removed L40; re-aligned corrector + mirror in + out of telescope.	
		Focus	5.1			7/7	L40 filter	
			5.1			7/7	"	
			3.8			7/7	"	
			4.0			7/7	"	
			4.2			7/7	"	
			4.4			7/7	"	
			4.6			7/7	"	
			4.2			7/7	"	
			4.2			7/7	"	
			4.2			7/7	" Held down. One camera screw loosened.	
		Loosened	Corrector	screws.				
			4.2			10/10		
		Removed new grating + replaced with old one. Found new grating had been punched by ring of corrector plate						
			4.2			10/10	Very much C to V	

All very bad — double lines

Test Focus

	T	shift	setting	PH		
F20	25°F	13	52	A		
21			55	B		
22			58	C	—	OK

281

Date 16 Feb/06 (Wed) Observer MSe Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.B	Hour Angle End
28875	HD92728	10 37.4	57 43	Gr40	IIaD	13	70°F	0 25[18]	01 01	A	E 1[illegible]
28875F	focus test	in in	outbound	"	"	"	"			B	—
28875T	Calibration Step Wedge for plate 28875										

Done Temp.
Focus
Done Temp.

Dome Temp. 28

Focus 5 7/2

Dome Temp. 26

Transparency Conditions ... very poor - cirs.
0100 - thick fog & more cirs

Ending Time E.S.T.	P.E.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		E U ~15	57 24	0	5.8	B9	15-15-15	B8-B9(SB) focus 5-1/2 #400/30	much too thin.
							~~5/5~~	6x10 plates	
							7/7		
								HEAT & LIGHT WERE ON IN WORKING ROOM.	

283 PH 1 loaded in n. pier

Date 16-17 Feb/66 (Wed-Thurs) **Observer** (Hall) Muse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
28876	BD 45°, 1859	10 38.3	45 12	40	Ta Ob	17	24	0 16	2 20	C	011
28876 F	focus tuft in n/s			40	Ta Ob	13	20°			C	
							20				

Dome Temp.
Focus 17/
Dome Temp.

Dome Temp. 25°F
Focus 17/5 R2
Dome Temp. 24°F

Transparency Conditions (heavy clouds over Tucson) good after midnight
Strong NW wind
0100 - wind is better

Ending Time E.S.T.	P.A.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
		W1 06	44 53	0-1	9.59	F4	15-15-15	KAFS-(Hal) FIELD DRAWN 57 Exp. meter not really working	
							7/7	a few filts	weak OK in center elsewhere variable
								SUGGEST SOME ADJUSTMENT IS NECESSARY.	
								0200: > 1/2 mag absorption over all sky	
								0230 - solid overcast	

285 1961 Unloaded

Date 17-18 Feb 66 Thurs-Fri Observer Mse - HA Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28877	HD67725	8 4.2	-11 3	G40	IIaO6	13	15°F	22 22[13]	22 48	C
28878	HD83650	9 34.9	-10 07	G40	IIaO6	13	15°	22 53[13]	23 19	A
28879	BD 45°1859	10 38.3	45° 12	G40	IIaO6	17	14/12	23 26[883]	02 12	B
28880	HD131861	14 ~~50.9~~	45 43	G40	IIaO6	13	10	3 14[45]	4 44	C
28881	HD131861	14 50.9	45 43	G40	IIaO6	13	8	4 45[11]	5 06	A
28881 F	focus test in/out			G40	IaO6	13				B
28881 T	Calibration Step Wedge for plates 28877-81									

Dome Temp.
Focus 54/
Dome Temp.

Hour Angle End
E0 46
E0 34
E0 35
E0 13

Dome Temp. 17°F

Focus 54/53½/53-/51⅓

Dome Temp. .....

Transparency Conditions good after 5:00 strong w wind

5:00 — > ~~1~~ mag. absorption

Finding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	00 14	-11 13	0	6.23	B9	15-15-15	B8 B9 (Hα)	focus 54 plate fogged
	E0 46	-10 23	0	6.2	B9	15-15-15	B8 B9 (5 B)	fine
	0103W	44 53	1	9.59	F4	15-15-15	(Hα) HAFS	for Field [illegible]
	E0 35	45 28	0	7.64	F3	15-15-15	(Hα) HAFS	focus 52 focus 51⅓ #800/22? clouds during exp. fine
	E0 13	45 28	0	7.64	F3	15-	Hα HAFS	
						7/7	Good plate	

STAR NO LONGER VISIBLE

- adjusted wp nuts, button plate [illegible]

- intermittent clouds after 02:00 [POOR]

287

Date 18 Friday Observer Re Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H

Dome Temp.
Focus 5
Dome Temp.

Hour Angle End

Dome Temp. 60°F

Focus 5.1

Dome Temp.

Transparency Conditions

opening up at 2200. cleaning sky
closed again at 2215. snow!

Ending Time E.S.T.	P.M.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
								Loaded PH in N Prog	

289

Date Feb 19/20 Sol Lam Observer Re/McQ/Le Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle End
~~28882~~	~~R U Cam~~	~~7 10.4~~	~~+69° 67'~~	~~Cass~~	~~IIaO~~	~~17~~	~~4°F~~	~~19h 32'~~	~~20h 37~~	~~A~~	~~W 1° 0'~~
28882	HD 33461	5h 05.3m	+41° 05'	Cass	IIaO	17	4°F	19h 32'	20h 37	A	W 1° 0'
28883	1;0+0.7 07	6h 22.6	+2° 19	Cass	IIaO	17	2°F	20h 52	21h 2 5 middle	B	0° 43 W
419-1	HR 2990	07 43.2	+28 07		T = 10s		800	✓	22h 02		0° 0' E
~~419-2~~	~~NGC 2403~~	——	could'n find it								
419-2	NGC 2950	09 40.3	+59 01		T = 40s				22 59		1° 0 E
419-3	HR 3800	09 32.1	+36 33		T = 20s				23 43		0° 0 E
419-4	NGC 3226	10h 21.6m	+20° 04'		T = 60s			after first set →	0h 41		0° 00
419-5	NGC 3227	↘						end →	1h 13		0° 32 W
					T = 60s			end →	1h 46		0° 56 W
419-6	HR 2990	07 43.2	+28 07		T = 10s			middle	2h 05		0° 00 W
419-7	〃	〃	〃		〃		end of	2nd set	2 25		0° 22
								3rd set	2 34		0° 31
								4th set	2 48		0° 45
							end of	5th set	2 50		0° 47

Dome Temp. Focus Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ..... Excellent

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						found star but poor tel illumination could not center it	
W1h10m	+41° 13'	0"	8.0	B2 V	15-45	focus 2? 800/25	fair
0h43 W	2° 19'	0	6.5	B9	15-15-45	38-39 focus 4? 800/45	fair
						IIaN IIaW 45 42 41 39 35	
0h 01m E		10"	1.21	K0 III		A5 A1 A3 A5 A5 B2 B2	
01h 00 E			11.9	G2	Sup	D6 D3 D5 D6 D6 D5 D5	
00h 04 E						B5 B2 B4 B5 B5 B6 B6	
00h 00			12.6	G2	E2	D6 D3 D5 D6 D5 D5 D4	
30' 32W							
1h 06W			11.3		E6	D6 D3 D5 D5 D5 D5 D4	
04° 03W			1.21	K0 III		A5 A1 A3 A5 A5 B2 B2	
04 22			"	"		- one latch slipped	
04 31						- wrong guide	
04 43						- good	
04 48							

291

Date Feb 19/20 Observer MCA/ai Julian Day

Done Temp.
Focus 46
Done Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
419-8	NGC 4203	$12^h 13.3$	$+33° 24'$		t_e 60"						
28884	KAFS BINARY HD 131861	$14^h 50.9$	$+45° 43'$	G 40	IIaO b	17	-5	05 02	06 22	^	1 10 11
28884 T	Calibration Step Wedge for plates 28882-84										

Dome Temp. -2°F

Focus 46

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
				11.5	G3	Ep	~~ABN~~ ~~ABW~~ 45 42 41 38 35 D6 Clouds	
22	1 10 W	+45° 26'	0	7.64	F3	15-15-15	Binary 800/19.5 fine	

293

Date Feb 21/22 Observer Db Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28885	HD 30122	$4^h 39.1$	$23°27$		IIaOb	13				A
28884 F1	Focus Test	Cnt Cnt / Dn - Dn			IIaOb	13	10°			A
								partly clear	21^h	
Dr Rocdes, Mt + Scarborough College student showed Jupiter + Sirius TB										
21^h 30^m started + round - closed up.										
	Feb 23 1916		Cn							
28881 F2	Focus Test	Cnt Cnt / Dn - Dn			IIaOb	7	17°			
F3					IIaO	7	17°			
F1	Sky N 4^h E	$23°$			IIaO	7	17°	4 exp		
F2	Sky	4^h E	$23°$		IIaO	7	17°	5 exp		

Dome Temp. 15°F

Focus ~~10~~(10°) 52

Dome Temp. .....

Transparency Conditions 0

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
—	—		6.12	B8		focus 52 CLOUDS 800/60	
			6.10 filter		5/5	focus 52	slt. to mod.
						[Henry - done] hooks for 74" mirror flaps Take off	
Focus 54.5					7/7	6.10 filter	OK
Focus 53.0					7/7	6.10 filter logged	OK
					3s	no filter	v. v.
					5s	6.10 filter	"

295

Date Feb 23/24 **Observer** MP **Julian Day** 54

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28895	HD 23324 to Ca	3 39.2	+24 32	G40	IIaD	13	25°	19 56	20 12	A
- 96	71D56/6m	7 10.1	+69 51	"	"	17	26°	21 16	23 46	B
28897	HD 42128	10 37.4	57 43	G40	IIaD	13		0 0	0 17	A
28898	BD 45° 1859	10 38.3	45 12	G40	IIaD	17	22	0 25	1 55	C
28899	focus test			G40	IIaD	13	21			
28900	Calibration Step Wedge for plates					28885-88				

Dome Temp. 7
Focus 51°
Dome Temp.

Hour Angle End
W 26
23
10

0:30 - guide focus.

296

Dome Temp. 26

Focus 26° (52) 56 1/2

Dome Temp. .....

Transparency Conditions .....

Dome turning W. button is too stiff!

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W2 26	+24 45	0	5.6	B8	15/15/-	B8-B9 trios validated for 40 33-329 B8-B9 1 of mirror cover flaps fell down 400/30	strong
W2 23	+69 45	0	9.5	K0	15/15-/-	Dome type motor not working properly - slide holder 'C' slide nearly broken. No comp. 400/30	fine
E0 26	57 22	0-1	5.6	B9	15-15-15	B8-B9 (5B)	strong winds & gusting
W1 10	44 53	0-1	9.54	F4	15 30 7/7	Hd-k+F5 focus 50 1/2 also fiche	very windy out of focus.

297

Date 24-25 Feb 66 (Thurs-Fri) Observer Rice Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I	Hour Angle End
28888 F_2	focus test					13	25			A	
28889	HD17929	2 47.8	68 25	G40	IIaO	17	25	18 40	19 31	C	02 37
~~28890~~	~~HD 16279~~	~~2 31.1~~	~~39 27~~	~~G40~~	~~IIaO~~	~~13~~	~~25~~			~~A~~	
28890	HD23324	3 39.2	24 32	G40	IIaO	13	25	19 41	19 55	A	02 27
28891	HD51892	6 54.0	+7 27	G40	IIaO	13	25	20 01	20 17	C	05 41
28891 T	Calibration Step Wedge for plates 28889-91										

Dome Temp.
Focus
Dome Temp.

Dome Temp. 32°F

Focus .....

Dome Temp. .....

Transparency Conditions POOR - high speed clouds from SE
07 00 - high cirrus moving clouds from S.W

298

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
							G10 filter focus 57.1/2	sky terrible
31 C	W2 37	6 8 42	0	8.1	138	15-15-15	FERNIE * 800/24	fine
				~~6.4~~	~~138~~		B8-B9 (SB) TELESCOPE IN BALANCE IN RA * ~~4~~	
55A	W 2 12	24 44	0-1	5.6	B8	15-30	B8-139 (SB) + (cirrus) 400/10	sunrise lower sunrise weak
17 C	E0 41	47 42	0	6.3	B8	15-15-15	B8-139 (SB) clouds 400/~~5~~	

wrong star

* tuning semi and guider

299) H C coaded in N pieces
[PHB is in the shop for repairs]

Date 26/27 Feb Sat/Sun Observer ai Re MTC DO Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28891F	~~focus test~~			G40	IIaOb	13	27°			A
28892	HD 23324	03h 38.2	+24° 32'	G40	IIaOb	"	"	18:35	18:57	C
28893	RU CAM HD 56167	07h 10.9	+69° 51'	G40	IIaOb	19		19:17	21:30	A
28894	HD 44996	06 19.8	-12. 55	G40	IIaOb	13	26	21:56	22:25 (middle)	C
420-1	HR 2990	07 43.2	+28 07		t= 10s			800V	22:50	
420-2	HR 3454	08h 41.4	+03 31		t= 20s				23:09	
420-3	HR 3800	09h 32.1	+36 33		t= 20s				23:25	
420-4	HR 3815	09 33.7	+35 59		t= 20s				23:42	
420-5	HR 2990	07 43.2	+28 07		t= 10s				00:03	
420-6	H.C 3379	10h 46.0	+12 46		t= 40s				00:49	
420-7	NGC 3384	10 45.7	+12 54		t= 40s				01h 17	
420-8	NGC 3459	10 58.5	+14 05		t= 50s				01 57	
420-9	HR 2990	07 43.2	+28 07		t= 10s				02 24	
420-10	"	"	"		10				233	

Dome Temp.
Focus 58.5
Dome Temp.

Hour Angle End

Dome Temp. 32

Focus 58.5/57.5

Dome Temp. .....

Transparency Conditions Excellent

300

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
						5-5	focus 58.5	clear
	01:17 W	+24° 45'	good	5.6	B8	15-15	B8-B9 spec. BINARY 400/34	grainy
	00 19 W	69° 46 5/8'	~2"?	9.5	K0	15-30	(Exposure with no good) 800/-	fine grain.
	02h 11m W	-12° 55'	~3.1/2	5.95	B8	15-15-15	B8-B9 Focus 57.5 400/~20	grainy
	(middle)			M.V			HBN HBW 45 42 41 33 35	
	01h:15m W			< 1.21	K0III		A5 A1/A2 A3 A5 A5 B2 B3	
	00:36 W		~3"	4.32	B3V		B5 A6 B2 B2 B2 B2 B2	
	00 05W			4.62	G8III		B6 B2 B4 B5 B5 (B4)/C2 C2	
	00 17W			5.18	G8 III-I		C2 B3 B5 C2 C2 C3 C3	
	02:29W			1.21	K0		A5 A1/A2 A3 A5 A5 B2 B3	
	00 12W		1"	10.5	G7	(E-1)	D6 D2 D4 D5 D5 D6 D6	
	00:40W			10.9	G5	(E7)	D6 D3 D4 D6 D6 D6	
	01:07 W			11.3	G0	(E6)	D6 D2 D4 D5 D5 D6 D6	
	4 30						A5 A1/A2 A3 A5 A5 B2 B3	
	4 39						A5 A1/A2 A3 A5 A5 B2 B3	

(THE SOCKET MISSING) ENTIRE

Illumination in top finder not working!

301

Date Feb 26/67 Observer Mel/Db Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H	Hour Angle
420-11	NGC 4203	12 13.3	33°24		60s				03 05		
420-11	NGC 5322	13 48.1	+60 21		40s				04 14		
420-12	NGC 5322	13 48.1	+60 21		50s				04 4		
420-13	HR 3800	09 32.1	36°33		20s				05 11		
420-14	2 s. α Set	15 42.6	06 38		20s				06 01		

Dome Temp.
Dome Temp.

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions Excellent

Hour Angle End middle	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	HBN	HBW	REMARKS 45	42	41	38	35	Quality
00 59W			11.5	G3	(Ep)	D6	D3	D5	D6	D6	D6	D6	
00 35W			11.1	G8	(G2)	D6	D3	D5	D6	D6	D6	D6	
0102W			11.1	G8	(E2)	~~D6~~ 5	D3	D5	D6	D6	D6	D6	
05 49W			4.62	G8III	-	B6	B2	B4	B5	B5	C2	C2	
1 28W			2.75	K2IIIp		B2	A3	A5	B2	B3	B5	B6	

303

Date March 2/3 1966 Observer Hd M.F TP MSe Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28895	68 Tau	1950 4 22.6	1950 +17 28.9	G10	IIIaO	9 XL	33F	18 49 90	21 49	auto
28896	HD 63112	7 42.1	−12 26	G40	IIaO13	13	33	22 21 16	22 52	e
28897	HD 63655	7 44.9	−13 06	G40	"	"	"	23 04 17	23 38	g
28898	HD 64141	7 57.1	+02 36	"	"	"	"	2346 11	0 07	c
28899	HD 89449	10 14.3	+19 59	G40	IIaO6	13		0 12 5	0 22	A
28900	HD 92588	10 36.3	−01 13	G40	IIaO6	13	33F	0 27 31	1 29	C
28900 F1	focus test in in/ out out			G40	IIaO6	13	31			A
28901	HD 131861	14 50.9	45 43	G40	IIaO6	13	"	2 04 44	3 26	A

Dome Temp.
Focus ...
Dome Temp.

Hour Angle End

Dome Temp. 37

Focus 60½

Dome Temp. 34

Transparency Conditions very poor

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	W 3 50	+17 53	2	4.2	A2 II	15/15/15	clouds much of time. Exp. interr. working only sporadically. EW# one counts last 41 mins. front = 5 secs. #20 #10	fair
	W 1 30	−12 34	1	6.37	B9	15/30	B8-B9	good
	W 2 15	−13 13	1	6.10	B9	15-15-15	"	fine
	W 2 30	+2 26	2	5.5	K3	15-30	Std. Vel. 800/90	fair.
	W 0 28	+19 41	1	5.3	F5	15-30	std. Vel. (CIRRUS) 800/45	too strong
	W 1 15	−01 32	1	7.4	K1	15-30	std. Vel. ~1 mag. absorption 800/24(?) getting worse (misaligned iris one)	fair.
	—	—				5/5	Gen. filter	OK.
	E 1 62	45 27	1	7.64	F3	15-15-15	Hd KAFS (clearing again)	fine

* RED WARNING LIGHT STAYS ON ALL THE TIME - TROUBLE APPEARS TO BE IN ~40 CAPPING KNOB. FIXED

Sunday, Mar 6 Overcast (20'30") and threatening to clear - later overcast although thin clouds 11h

(21'03", some * snow)

385 Light snow 2h 01m

Date Mar 7/65 Observer Pe - Hlb Julian Day ?

DO mse

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.H
28702	[illegible]	[illegible]	[illegible]	640	IIaD	17	19°	19h 22m 40s	20h 42m	A
28703	1100 + 307	7h 3.2m	-23° 41'	640	IIaD	13	16°	20h 52m	21h 30m	C
28703	Clear	Sky Wedge	for plates 28702-03							
		1965							middle	
421-1	HR 2930	07h 43.2m	+28 07		I 10 sec		800 V 2.5		10h 00m	
-2	HR 3454	08h 41.4m	+03 31		20 sec				0h 20m	
-3	HR 3800	09h 32.1m	+36 33		20 sec				10h 46m	
421-4	HR 3815	09 33.7	+35 53		20				11 07	
-5	HR 3974	10h 08.3m	+35 25		20				11 27	
-6	BS 4090	10h 23.7m 1950	34 00		20				11 56	
421-7	HR 3454	08h 41.4m	+03 31						00 16	
-8	HR 3800	09 32.1	+36 33						00 35	
-9	HD 95735	11 01 5	+36 17						1 08	
-10	HR 3454	8 41.4	+3 31						1 25	
-11	"	"	"						01 33	
421 -12	HR 4883	12 50.0	+27 44						01 53	
-13	HR 4785	12 32.2	+41 33						02 12	

Dome Temp. 18°

Focus

Dome Temp.

Transparency Conditions Very good — Photometric later

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	W1ʰ12	+8°44	9	8.2	[illegible]	15-15	Cn-Bc Focus 55 Exposure Meter for Photometry 800/?	Good
	W1ʰ06	-23°-5			B/Ve	15-15-4	OK! 800/25	fine
	middle						HB-N HBW 45 42 41 38 35	
	1ʰ0.5W		4" incl	1.21	KOIII		A4 A1 A3 A5 A5 B2 B3	
	00 23W		4"	4.32	B3V		B4 B1 B2 B2 B2 B2 B2	
	00 02E			4.62	G8III		B5 B2 B4 B5 B5 B6 C2	
	00 17W			5.48	G8IV-V		C2 B3 B5 B6 B6 C2 C3	
	00 05W			4.47	A7V		B5 A6 B2 B3 B3 B4 B4	
	00 16W			?	F0V		B6 B2 B3 B3 B3 B4 B5	
	02 20W			4.32	B7V		B4 B1 B2 B2 B2 B2 B2	
	01 46W			4.62	G1V		B5 B2 B4 B5 B5 B6 C2	
	WO 51			~7	M		D2 C3 C5 D2 D1 D2 D2	
	W3 28			4.32	B3V		B4 B1 B2 B2 B2 B2 B2	
	03 36W			"	"		B4 B1 B2 B2 B2 B2 B2	
	00 12E			5.07	G0III		B6 B2 B4 B5 B5 B6 B6	
	00 24W			4.3	G5V		B5 B1 B3 B3 B3 B4 B4	

307

Date 8 Mar - Tues **Observer** HLb Mch Mse **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.
421 -14	HR 4920	12 57	17 38						2 32
-15	HR 3800	9 32.1	36 33						
-16	HR 5447	14 33.1	29 54						03 15
-17	HR 3800	09 32.1	36 33						03 3[illegible]
421 -18	"	"	"						0[illegible]
-19	HR 5511	14 44.5	-07 02						04 06
-20	HR 5854	15 42.6	+6 32						4 23
-21	HR 5933	15 54.8	+15 47						4 41
-22	HR 6355	17 03.7	+12 47						5 02
-23	HR 6629	17 46.2	+02 43						05 25
-24	"	"	"						05 45

Dome Temp. 14
Focus
Dome Temp.

Hour Angle End

Dome Temp. 14°F

Focus .....

Dome Temp. .....

Transparency Conditions .....

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS							Quality
							HβN	4/3W	45	42	41	38	35	
2 32	W 0 20				G8 III		B6	B3	B5	C2	C2	C4	C5	
				4.62	~~G8 III~~		B5	B2	B4	B5	B5	B6	C2	
33	00 34E			4.48	F2 V		B5	B1	B3	B3	B3	B4	B4	
	04 48W			4.62	G8 III		B5	B2	B4	B5	B5	B6	C2	
	05 02W			"	"		"	"	"	"	"	"	"	
04 26	00 07W			3.76	A0 V		B4	A4	A6	A6	A6	B2	B3	
23	E0 43			2.75	K2 III p		B2	A3	A5	B2	B3	B5	B6	
4 41	E0 29			3.86	F6 V		B4	A5	B2	B3	B2	B3	B4	
1	E1 16			4.91	A3 III		B6	B2	B3	B4	B4	B5	B6	
01	01 35E			3.74	A0V		B4	A5	A6	B2	B2	B3	B4	
01 41	01 16E			"	"		B4	A5	A6	A6	A6	B2	B3	

309

Date Wed June 9-10/65 **Observer** [illegible] **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P
28904	HR 1227	03 11.3	+64 54	G40	IIaO	13	38°30	18 51	19 13	A
28905	74 Aur	06 17.2	+49 20	"	"	"	"	19 19	19 35	C
28906	7 Cam	04 59.5	+41 06	"	"	"		19 41	19 42	A
28907	"							19 53	19 53½	A
28908	119 Tau	05 [illegible]	+18 31	"	"	"	37°30	20 07	20 [illegible]	C
28909	"	"	"	"	"	"	"	20 17	20 21	A
28910	56 Ori	05 47.4	+01 50	"	"	"	36	20 28	20 42	C
28911	"	"	"	"	"	"	36	20 47	20 [illegible]	A
28912	b Gem	06 5.3	+22 56	"	"	"	36	21 09	22 17	C
28913	HD 43818	06 [illegible]	+23 30	"	"	"	30	21 26	21 [illegible]	A
								2	2	
28913T	Correction Strip Wedge		for plate 28904-13							

Dome Temp.
Focus 59
Dome Temp.

Hour Angle End
1/46
53
W 1 1/2
W 1 3/4
W 1 1/2
W 1 1/2
W 1 1/2
W 1 1/2
W 1 1/2

Dome Temp. .....

Transparency Conditions .....

Focus 59 (found it set at 44! Who set it so low?)

Dome Temp. .....

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 46	+65 05	2	6.02	G5 III	15/15/15	11 Std missed 5 min → 800/40	strong
E 3 m	+49 18	2	6.0	M0 Ia	15/15/	MK Std 210/42	weak
	+41 07	2	3.17	B3V	45	" upon + around on 400 on 20V	guiding strong sending faint response weak comp
W 1 41	"	2	"	"	45	"	fair
W 1 35	+18 35	2	4.73	M2 Ib	45	" 200/24	fair
W 1 42	"	2	"	"	45	" 500/13	fine
W 1 45	+01 51	2	5.16	K2 II	15/15/15	" 200/4	fine
W 1 54	"	1	"	"	30/15	" 200/6	fine
W 2 59	+22 55	"	7.2	M1 Ia	15/15/15	" clouds [illegible] 300/	weak
W 3 21	+23 51	"	5.5	B0 II	15/15/0	" field drawn - sketch ✓	weak

PH 400 C loaded in N. fiber
Nose

311 Date 12-13 Jan/66 Observer Cr – Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.
28914										A
										C

Dome Temp.
Focus
Dome Temp.

Hour Angle End

Dome Temp. 36

Transparency Conditions ... 2? OP

312

Focus .....

Dome Temp. .....

NO EXP. MTR LEFT ON ALL NIGHT 11/15

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	F								
	C								

Date Mon 14/15 Mon/Tue Observer Pe-Mc/Ab/Db Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28914	HD52348	6h30.8	−20°01	G40	IIIa-J	13	37°	19h35'	20 29	A	0042W
		1965			τ=?						
422-1	HR 2990	07h 43.2	28°07		12 secs		800T		21h 08'		00 36W
-2	-"-	-"-			12 secs				21h 21		00 49W
-3	HR 3454	08h 41.4	+03 31		20				21 36		01 44W
28915	HD 83650	09 34.9	−10 07	G40	IIaOb	13	38	22h15'	22h53	C	00 27W
28916	HD92728	10 37.4	+57 43	G40	IIaOb	13	37	23h27'	23 45	A	00 14W
28917	HD92824	10h 38.3	+45°2	"	IIaOb	17	37		0 53	A	
28917	31 Com	12 46.8	+28 05	G40	IIIaJ	13	35	01 42	01 57	A	
28918	"	"	"	"		"	"	01 58	02 05	C	
28919	"	"	"	"	"	"	"	0206	02 10	A	
28920	HD131561	14 50.9	45 43	G40	IIaOb	13	34	2 18	03 45	C	
28921	HD143187	15 53.9	+59 12	G40	IIaOb	13		03 51		A	
28922	HD 155711	17 08.2	+52 32	G40	IIaOb	13	30	4 22	4 37	C	
28923	HD 169820	18 21.4	+16 55	G40	IIaOb	13		4 45	5 05	A	

Dome Temp. 44°

Focus

Dome Temp. 32°

Transparency Conditions good, clouds at sunset for about 1 hr. 0.5 — poor UAs overcast, settled/light

314

Ending Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
20 29 A	00 42W	-20° 06'	0+	5.9	B8	10-6-15	B8-B9 NO EXPM.	weak guiding
					H3N	H3W	45 / 42 / 41 / 38 / 35	
	00 36W		4"	1.21	K0 III		A4/A5 A1 A3 A5 A5 B2 B2	
	00 49W						A5 A1 A3 A5 A5 B2 B2	
	00 06W			4.32	B3 V		B5 B1 B2 B2 B2 B2 B2	
							cloudy in SW, hazy fading.	
	00 27W	-10° 25'	1+	6.2	B9	15/15/15	focus 62., Spect Binary B9-09	weak
	00 14W	+57 22	2	5.8	B9	15/15/15	62 —"— B9-B9	fair/poor
			2	1.70	K5	15/15	KAF5 Binary focus 62 for letters	fair
	00 20W	+27° 44'	0.1	5.63	G0 III	15/15/15	MK. STD. 1X NORMAL 0100 forecast	fair
	00 27W	"	0	"	"	20/20	" ½ X NORMAL	guiding
	00 32W	"		"	"	150	" ¼ X NORMAL	fair
	00 04W	45 26	0	7.64	F3	15/15/15	HD/KAF5 focus 62	weak
	~~50 32~~ 28 32	+59° 00'	0	6.15	B9	15/15/15	B8-B9 (d+e)	fair
	E1 21	52 25	0	6.11	B9	15/15/15	B8-B9 (d+e) focus 57	fair
	E2 06	14 27	0	6.43	B9	15/15/15	B8 B9 (")	fair

315

Date 15 Mar/66 : Tues Observer HD, Mse Julian Day

Dome Temp. 3
Focus
Dome Temp.

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.	Hour Angle End
28924	HD170200	18 23.1	+6 08	G40	IIaOb	13		05 09	05 25	c	E 1 49
28925	HD174853	18 47.5	+13 51	G40	IIaOb	13		5 30	5 45	c	E 1
28925 F1	focus test	air in/out		G40	IIaOb	13				c	
28926 T	Calibration Step Wedge for plates 28914-25.										

Dome Temp. 30

Focus

Dome Temp. 28°F

Transparency Conditions fair - poor

316

Finding Time E.S.T.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
	E1 49	+06° 11'	0 0	5.6	B8	15/15/15	138-139 (SB)	latony fine:
	E1 52	13 57	0	6.1	.39	15/15/15	138 139 (SB) DAWN	
						7/7	6400 feet	center to west limit

317

Date 15/16 MARCH TUES/WED **Observer** Mee – Hall **Julian Day**

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
423 – 1	HR 2473	06h 41.9	+25° 10′		800V	20s	29°F		19h 30m	
423 – 2	HR 2047	05h 52.9	+20° 16′			〃			19 43	
423 – 3	HR 2990	07h 43.2	+28° 07′			12s			20 10	
423 – 4	NGC 2403	07h 33.6	+65° 42′			20s			20 59	
423 – 5	HR 3454	8h 41.4	+3° 31′			20s			21 39	
423 – 6	HR 2990	07h 43.2	+28° 07′			12s			22 37	
– 7	NGC 2903	09 30.2	+21° 49′			50s			23 53	
– 8	NGC 3031	9 51.5	69 18			20s			0 04	
– 9	HR 2990	7 43.2	28 07			12s				
– 10	NGC 3379	10 46.0	+12 46			40s			1 09	
– 11	NGC 4258	12 17.3	47 30			50s	27°F		02 13	
– 12	〃 4449	12 40.4	+44 11			〃	26°F		03 18	
– 13	NGC 5055	13 14.1	+42 12			〃			04 09	
– 14	HR 5933	15 54.8	+13 47			20s			04 57	
– 15	HR 6255	17 03.7	+12 47			20s	25°F		05 15	
– 16	[illegible]	[illegible]	[illegible]							

Dome Temp. .....

Focus .....

Dome Temp. .....

Transparency Conditions ... Hazy around Horizon at first

318

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS HSN	HSW	45	42	41	38	35	Quality
0h03 W			3.18	G0 Ib		B3	A4	A5	B3	B4	B5	B5	
1h11 W			4.62	G0 V		B5	B1	B3	B4	B4	B5	B5	
0h18 W			1.21	K0 III		A5	A1	A3	A4	A5	A6	B2	
0h32 W			8.80	F2	Sc II	D4	D2	D4	D5	D5	D5	D5	
0h33 W						B4	B1	B2	B2	B2	B2	B2	
1h49 W			1.31	K3 III		A5	A1	A3	A4	A5	A6	B2	
0 44 W			9.08		Sc I-II	D6	D2	D4	D5	D5	D5	D5	
W1 26			7.85	G3		D5	D2	D4	D5	D6	D6	D6	
			1.21	K0 III		A5	A1	A3	A4	A5	A6	B2	
W1 40			10.5	G7		D6	D2	D4	D6	D6	D6	D6	
0112 W			8.90	G0	Sc	D6	D2	D4	D5	D5	D6	D6	
0154 W			7.88	G7	F1	D5	D3	D4	D6	D6	D6	D6	
0210 W			9.26	F5	Sc I	D6	D3	D5	D6	D6	D6	D6	
0h13 W			3.36	F6 I		B4	A5	A7	B1	B1	B3	B4	
0h33 E			4.91	A3 IV		B6	B2	B3	B4	B4	B5	B5	

310

Date 16/17 March/66. Observer mcl HD mf Julian Day mcl mse

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28926	HD 35600	05 20.8	+30 07	540	500	13	28°	18 59	19 13	A
28927	"	"	"	"	"	"	"	19 14	19 20	C
28928	3 Gem	06 3.7	+23 08	"	"	"	"	19 25	19 45	A
28929	"	"	"	"	"	"	"	19 46	19 56	C
28930	HD 43856	06 13.7	+23 19	"	"	"	"	20 04	20 53	A
28931	π Leo	09 54.9	+08 31	"	"	"	"	21 03	21 36	C
mid plate holder is loaded									middle	
424-1	HR 2990	07 43.2	+29°07'		800	12S			22 15	
-2	HR 3800	09 32.1	+36 33			20S			22 35	
3	NGC 2903	09 30.2	+21°40'			60S				
-4	NGC 3031	9 51.5	69 18			20S				
-5	HR 2990	07 43.2	+29 07'			12S			00 59	
-6	HR 3800	09 32.1	+36 33			20S			01:15	
-7	NGC 4258	12 17.3	47 30			40S				
-8	HR 3800	9 32.1	36 33			20S			02:14	

Dome Temp. 32

Focus

Dome Temp.

Transparency Conditions Fair → Poor 320

Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
W 1 06	+30 10	1	5.7	B9 I$_b$	15-15-15	MK Standard. Light clouds,	fine.
W 1 14	"	"	"	"	"	"	fine.
W 56^m	+23 07	1	5.98	B2 : I$_b$	15-15-15	"	[illegible] weak
W 1^h 07^m	"	"	"	"	#5		[illegible] weak.
W 1 : 5	+23 17		7.0	B9 I	15-15	"	[illegible] weak.
E 1 02	+8 12		6.31	M : III	15	"	fine.
[illegible]						HDN HDN 45 42 41 39 35	
1^h 51^m W			1.21	K0 III		A5 A1 A3 A5 A5 B2 B2	
0 23 W			4.82	G9 III		B6 B2 B4 B5 B5 C2 C2	
						D6 light clouds	
[illegible]			7.95	G3		D5 D2 D4 D6 D6 D6 D6	light clouds
4 31 W						A5 A1 A3 A5 A5 B2 B2	
2 59						B6 B2 B4 B5 B5 C2 C2	light clouds
			8.90	G0		D6 D2 D4 D5 D5 D5 D5	
4 02 W			4.62	G8 : I		B6 B2 B4 B5 B5 C2 C2	

321

Date 17 March/66 - Thurs. Observer MSE Julian Day

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.	P.I
28932	HD131861	14 50.9	45 43	G40	IIaOb	13	25°F	2 41 45	4 11	A
28933	HD144579	16 01.5	39 24	G40	IIaOb	13	24	4 16 30	5 16	C
28934	HD161701	17 41.9	-14 42	G40	IIaOb	13	24°F	5 21 10	5 41	A
28934 F	focus test in in/out of f			G40	IIaOb	13	24°F	—	—	C
28934 T	Calibration Step Wedge for plates 28926-34									

Dome Temp. 27

Focus 57 1/3

Dome Temp. 25

Transparency Conditions fair-poor

322

Ending Time E.S.T.	P.	Hour Angle End	Declination	Seeing	Ptg. Mag.	Sp.	Comp.	REMARKS	Quality
4 11	A	W 0	32 45	27	0-1	7.64	F3	15-15-15 (Hd) KAFS	fine
5 16	C	W 0	32	39	15	0-1	7.2	G8	15-15-15 Std. Vel. 2 1/2 mag. absorption	fine
5 41	A	E 0	44	-14	42	0-1	6.1	B9	15-15-15 136-139 (SB) > 1/2 mag "	breaks
							7/7	G 10 filter	DAW	cirrus/mist

323

Date..... **Observer**..... **Julian Day**.....

Plate No.	Object	R.A. 1900	Declination 1900	Inst.	Emulsion	Slit	Temp.	Starting Time E.S.T.	Ending Time E.S.T.

Ending Time
E.S.T.

325

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326

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